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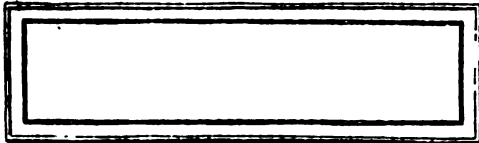
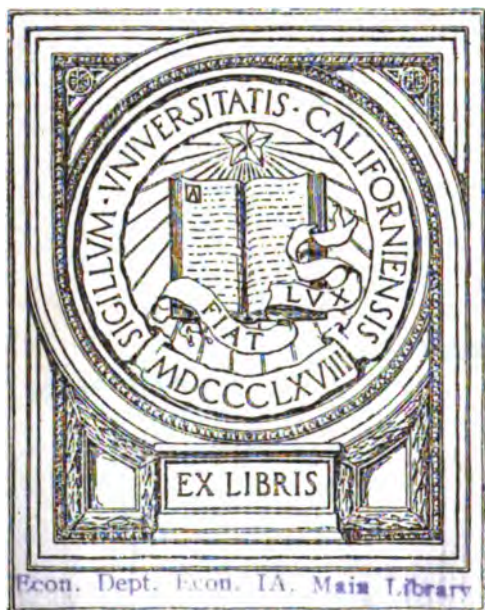
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**ADVERTISING**  
**THE TECHNICAL PRODUCT**



UNIV. OF  
CALIFORNIA

# ADVERTISING

## THE TECHNICAL PRODUCT

BY

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**McGRAW-HILL BOOK COMPANY, Inc.**

**NEW YORK: 239 WEST 39TH STREET**

**LONDON: 6 & 8 BOUVERIE ST., E. C. 4**

**1920**

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ABSTRACT

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THE MAPLE PRESS YORK PA

**TO THE MAN  
WHO PAYS THE ADVERTISING BILLS,  
THE MANUFACTURER OF TECHNICAL PRODUCTS.**





## PREFACE

No serious attempt could be made to cover the subject of advertising the technical product in a single volume of the present size. No more can be done than to discuss the important factors of the advertising problem that are peculiar to advertising the technical product.

Here and there, this book steps on some one's toes. This is not the result of a conscious effort on the part of the authors to "reform" practice. The practice of advertising technical products does not need reforming; it is too highly developed and governed too generally by the intelligent application of sound advertising and selling principles. The authors simply have disagreed here and there with phases of practice, and have said so frankly. On the other hand, wherever certain practices have been found to possess such unusual merit that the authors could stand squarely behind them, these have been "advertised" in the book, at the risk of an occasional cry from the gallery of "press agents" or "propaganda". A book of this kind must be frank to be constructive; "pussy-footing" never really advanced any cause.

The name of the publishers of this book is similar to the name of the publishers of a large group of engineering magazines. The reader should be informed, therefore, that the book publishers are an entirely separate corporation, with an entirely independent publishing policy and operated by an entirely separate staff; further, that the understanding was established before work was begun on the manuscript that the authors should have *carte blanche* to say what they pleased. The reader can judge for himself, as he reads through the book, whether anybody's style has been cramped.

Any merit this work may possess is due to the wholehearted assistance and co-operation of many business friends of the authors. The list of contributors might be headed accurately, "A Chapter from Who's Who in Adver-

tising Technical Products''. The efforts of these men, who all have been successful in various phases of the work discussed here, have resulted in impregnating the book with the substance of practical experience.

The following successful executives graciously spent their good time in preparing material for the book: J. C. McQuiston, Manager, Westinghouse Department of Publicity; Robert Porter, Vice-President, Jaxon Steel Products Company; F. M. Feiker, Vice-President, McGraw-Hill Company; J. A. Harlan, Purchasing Agent, Delco-Light Company; M. F. Lawrence, Sales Promotion Manager, Hyatt Roller Bearing Company; P. C. Gunion, Advertising Manager, Industrial Division, General Motors Corporation; O. W. Crawshaw, President, Crawshaw Service; S. Sidney Neu; E. E. Eby, American Director, Delco-Remy, Limited; T. P. Cunningham, Vice-President, Lincoln Products Corporation; D. L. Darnell, Assistant Sales Manager, Baker Industrial Truck Company; C. A. Tupper, President, International Trade Press Association; F. D. Wood, Advertising Department, *Good Housekeeping*; R. Bigelow Lockwood, Manager, Advertising Service Department, McGraw-Hill Company; Jesse H. Neal, Executive Secretary, The Associated Business Papers; J. Frank Eddy, The Dando Company; J. D. McGuire, President, McGuire Printing Company.

The authors acknowledge gratefully the careful reading of the manuscript by Professor George Burton Hotchkiss, Head of the Advertising and Marketing Division, New York University, and Ralph Starr Butler, Director of Commercial Research, United States Rubber Company.

Credit is given also for the ideas suggested by the magazine, *Printers' Ink*, and the book, *Advertising, Its Principles and Practice*.

THE AUTHORS.

NEW YORK,  
June, 1920.

# CONTENTS

	Page
PREFACE. . . . .	vii

## PART I

### THE GENERAL PROBLEM AND ITS ECONOMIC ELEMENTS

#### CHAPTER

I. Introduction . . . . .	3
II. Advertising the Technical Product. . . . .	7
III. The Economic Problem . . . . .	18
IV. The Product . . . . .	25
V. The Market for the Product . . . . .	34
VI. Advertising the Product to the Market. . . . .	54
VII. The Advertising Appropriation . . . . .	67
VIII. The Campaign . . . . .	78

## PART II

### THE INSTRUMENTS AVAILABLE FOR ADVERTISING THE TECHNICAL PRODUCT

IX. The Technical and Trade Magazines. . . . .	99
X. The Popular Magazines and Newspapers. . . . .	114
XI. Direct Mail Advertising . . . . .	126
XII. Prospectuses, Bulletins, Catalogues . . . . .	143
XIII. House Organs. . . . .	154
XIV. Educational Work. . . . .	170

## PART III

### TECHNICAL ADVERTISEMENTS

XV. Advertising Ammunition. . . . .	179
XVI. Technical Advertising Display . . . . .	203
XVII. Technical Advertising Copy . . . . .	227

## CONTENTS

## PART IV

## ADVERTISING ORGANIZATIONS

CHAPTER	PAGE
XVIII. The Advertising Department . . . . .	257
XIX. Advertising Counsel. . . . .	268
XX. The Publisher's Service Department. . . . .	273

## PART V

## APPENDIX

XXI. Dealer Co-operation. . . . .	285
XXII. Criticisms of Advertisements. . . . .	297
XXIII. Bibliography . . . . .	349
INDEX. . . . .	359

**PART I**  
**THE GENERAL PROBLEM AND ITS**  
**ECONOMIC ELEMENTS**



# ADVERTISING THE TECHNICAL PRODUCT

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## CHAPTER I

### INTRODUCTION

Advertising, a potential science—What technical advertising needs—  
The engineer and business.

#### ADVERTISING, A POTENTIAL SCIENCE

Advertising has effected a revolutionary change in the methods of distributing general commodities during the last forty years. And during this period the application of advertising has been developed so that to-day it is potentially a science. Advertising, like electricity, is difficult to define, but it has become recognized as a positive force in merchandising, and the laws governing its application are becoming rapidly formulated into code.

A science is developed just as rapidly as there are developed means of weighing and measuring the various factors that come under consideration in the science. We have not yet advanced very far in developing standard methods of weighing advertising factors. For this reason, advertising, as practised at present, is only a potential science. Advertising men, particularly those with engineering training, have a sense of the things that are lacking in advertising practice. And during the next five or ten years a great deal of research will be made to provide more accurate means of weighing and measuring the effective factors in advertising.

Technical advertising really should blaze the way in formulating a standard code for general advertising, be-



#### 4. GENERAL PROBLEM AND ITS ECONOMIC ELEMENTS

cause the technical advertising field is infiltrated universally by men of the technical or scientific type. These men feel more or less consciously at the present time that a great deal can be done to introduce laboratory methods into the solution of advertising and sales problems. And considerable advance is being made in the introduction of quantitative thinking to supplement the qualitative thinking that has prevailed in advertising.

#### WHAT TECHNICAL ADVERTISING NEEDS

Technical advertising in its practice today is well developed. The quality of the advertising that comes to the buying-power executive's desk is an evidence of the fact that technical advertising men, generally, are applying sound principles to the promotion of sales by means of advertising.

What technical advertising needs most badly is an exposition of these principles, which are being used more or less sub-consciously by men who have mastered them through experience. These principles properly set forth will provide the basis for the science of advertising the technical product. And the student or the young man in advertising will have at hand a means of accelerating himself in the subject more rapidly. Further, there must be provided for the manufacturer of technical products, a means of applying more definitely and surely the forces of advertising that he may require at any particular time to solve his problem of filling his plant with business, or of keeping it filled.

Technical advertising campaigns are characterized in general today by their smallness and by their lack of boldness in execution. This condition is due to a lack of sureness on the part of the advertising men who are responsible for the design and operation of campaigns. This timidity in turn is due to lack of well-crystallized knowledge.

Just as soon as advertising principles are better established, advertising men will be able to display the same

boldness as the engineers who designed and built for successful operation the first 40,000-h.p. turbo-generator set by applying the principles they had mastered in building much smaller units.

There is too much loose talk in advertising about the elusiveness of the factors involved in the work. "Experience is the best teacher," it is said. Experience is not valuable unless principles can be deduced from it—principles that serve in the building of plans and the execution of campaigns not related in detail to those included in the experience. Principles must be evolved that can be applied to the building of bigger and better advertising campaigns, campaigns that work positively to fill a big plant with business, and keep it filled, with a minimum ratio of advertising expense to sales volume.

### THE ENGINEER AND BUSINESS

The engineer is being forced, because of the bigness of the organizations with which he is now connected, to look more and more into the business factors related to the development of these organizations. The engineer is becoming more of a business man, because he has discovered that it is not enough for him to make his equipment and get it ready for sale, but that he must get out into the field and into contact with the users of his equipment, as a means of controlling and developing the distribution of it, and of keeping his eye on the service it gives. The engineer is taking up the problems of distributing his own products and his engagement in these problems is making a business man of him.

An interesting possibility in connection with this greater interest the engineer is being forced to take in distribution problems, including advertising and selling, is that his knowledge of the physical factors to be considered in distribution may serve a great usefulness in connection with the distribution of general commodities.

And perhaps we can look forward safely to the time when,

## 6    GENERAL PROBLEM AND ITS ECONOMIC ELEMENTS

after he has worked out his own problems of distribution pretty well, he will look around and find a great many things he can do toward the solution of the problems of distributing general merchandise, foodstuffs, clothing, furniture.

## CHAPTER II

### ADVERTISING THE TECHNICAL PRODUCT

The development of technical advertising—Technical products defined—The forms that are called advertising—Conditions peculiar to advertising technical products—Economical and uneconomical advertising—The problem today, production; tomorrow, sales.

#### THE DEVELOPMENT OF TECHNICAL ADVERTISING

Advertising, as we know it to-day, is a development of the last thirty-five years, but we find traces of advertising, in one form or another, as far back as we care to search history. In the quaint little English town of Grantham, there is a tavern that once belonged to the Knights Templars and that saw the royal guests, King John in 1213, and King Richard III in 1483, entertained within its walls. This tavern was not without its advertising, for over the lintel of the door there hung the sign of the tavern, an advertisement of its hospitality.

The first technical advertisement the authors can find is in a copy of the *Boston Gazette and Country Journal*, of March, 1770. This is an announcement of one William Williams, maker of "Mathematical Instruments". He informs us that at his shop in King Street, Boston, two doors east of the sign of Admiral Vernon, he has for sale, "Gauging and Surveying Instruments, Plotting Scales and Protractors".

In an early copy of the *American Machinist*, Number One of Volume Four, dated January, 1881, we find the advertisements of many present day manufacturers. Among these are the Brown and Sharpe Manufacturing Company, announcing a "Patent Universal Milling Machine", the Ashcroft Manufacturing Company of Boston, The Morse Twist Drill and Machine Company, Pratt and Whitney, the Billings Spencer Company, and William Sellers Com-

pany. Undoubtedly a careful study of the files of the *American Machinist* would reveal the fact that these companies, well known then and well known to-day, have been constant advertisers throughout all these years.

...ct, Savoy, Cellery, Endive, ...  
 ...ory, Baum, Rue, Sives, Sage, Mint, Sorrel. Allo,  
 ... and Horse Radish, all Sorts of dried Sweet Herbs, all  
 at the very lowest Prices, by Wholesale or Retail, for Cash.

---

**Mathematical Instruments.**  
**William Williams**  
 Mathematical Instrument Maker,

Has to sell at his Shop in King-Street, two Doors East of the Sign of Admiral Vernon, near the Head of the Long-Wharf, BOSTON.

**A** Large Assortment of Hadley's and Davis's Quadrants, hanging and standing Compasses, in Brass and Wood; Gauging and Surveying Instruments, Cases of Instruments, large and small Perspective Glasses, in Ivory, Wood and Fish-skin, plotting Scales and Protractors, Gunter Scales and Dividers, Surveyors Chains, Artificial Magnets with Cases, Sand Glasses from 2 Hours to  $\frac{1}{2}$  Minute, Instruments of a new Construction to measure Boards, Quarter Waggoners, Atkinson's Epitome, Wilson's ditto, Patton's Navigation, Seamen's Assistants, Callenders, Mariners Compasses rectified, Young Man's Companion, Journal Books, Ink-Powder, Quills & Paper, an Assortment of Brass Pocket Compasses with & without Cards, Box Rules, Slates and Pencils, Penknives, Jack knives, &c.

All Sorts of Mathematical Instruments are made and repaired by the above William Williams. Those who will favour him with their Custom, may depend upon being well used, and have their Work done with Fidelity and Dispatch.

---

**R**AN-AWAY from his Master John Langdon, the 20th of this Instant February, an Indented Servant Lad of 14 years of Age, named EBENEZER BLANCHER. He had on when he went away, a Frock and Trowsers, over a dark striped Home-spun Coat and Breeches, a striped cotton and linen Shirt, and a Pair of figured Buckles, this country boy, and will tell a good plausible story if you will up and bring him to his Master.

Advertising the technical product in 1770.

The early advertisements in the technical press consisted usually of announcements and business cards. Apparently little attention was given to the preparation of the advertisement, although in the Brown and Sharpe announce-

ments of 1881, we find real selling copy in the advertisement of the "Patent Universal Milling Machine".

From these early advertisements, occupying at the most a quarter of a page, technical advertising has grown to be the great force we find it to-day. A comparison of the early trade and technical papers with those of to-day, shows not only a large increase in the volume of advertising carried but a great improvement in the copy and physical appearance of the advertisements. For, as manufacturers have come into a realization of the great force of scientific advertising, they have given more and more study to the preparation of copy and illustration, to the making of their advertising effective.

### TECHNICAL PRODUCTS DEFINED

Technical products, so far as this book is concerned, are machines, tools, equipment, and supplies, the purchase and use of which are governed in general by technical men or by men who hold the technical view-point in relation to the products. Technical products are bought purely for their utilitarian value; the buying test is the cost per unit of satisfactory service. They are auxiliaries to earning dividends in industry. They have a use that is peculiar to industrial or engineering or business or agricultural purposes. Lead pencils, soap, ordinary clocks, automobiles, are not technical products; lathes, cranes, drill rods, grinding wheels, belting, motor trucks, tractors, electric motors, bearings are technical products.

The technical product is the product that is bought by the man who employs either directly or indirectly engineering-economic principles in buying the product. For instance, motor trucks and automobiles are made according to the same general engineering and production methods, but they are bought by the same man from two entirely separate points of view. The man who buys a motor truck for his business, also may employ a motor car for his personal use. Even though he be an engineer and a technical man, he will not be governed very strictly by





removing misunderstandings and strife among men. "A reconstitution of the definitions of terms," he replied.

Men selling technical products argue a great deal about the merits of advertising. A mutual friend of the authors who sells rubber belting told them the other day that he did not believe in advertising. He did not mean what he said. He meant that he did not believe in a particular form of advertising on which his company is spending a great deal of money. There cannot be any argument about the effectiveness of scientific advertising as a means of promoting the sales of technical products. The authors believe this can be accepted as an axiom in selling these products. The entire problem consists in making wise choices of advertising methods. These choices must be based on the full recognition of the great range, variety, and number of combinations of methods available.

A salesman of mining supplies dropped in the other day from the West. His territory is the Rocky Mountains, from Alaska to Mexico. He is able to see his prospects and customers only about three times a year. Between visits he bombards them with post cards and personal letters. When he first went into the territory, a couple of years ago, he mailed the cards and letters as a means of accelerating his acquaintanceship in the territory; now he mails them to avoid being forgotten when orders are mailed. These post cards and letters are just as much a form of advertising as is a double-page display advertisement in a national magazine, although they are away over at the other end of the scale.

#### CONDITIONS PECULIAR TO ADVERTISING TECHNICAL PRODUCTS

##### *I. In the case of the buyers:*

- (a) Buying influences are generally males.
- (b) Buying influences are intelligent and critical.
- (c) The buying attitude is not a personal attitude, but is a function of the psychology of the industrial or commercial group to which the buyer belongs.
- (d) In general, the buyer who can use a product to economic advantage has the money to pay for it.

## 12 GENERAL PROBLEM AND ITS ECONOMIC ELEMENTS

### II. *In the case of the market:*

- (a) The distribution of the market has no inherent relation to the distribution of population.
- (b) The total number of buyers is comparatively small.
- (c) The character of one market for a particular product may be entirely different from the character of some other market for the same product.
- (d) The character of a market is peculiar to the product to be advertised to that market.
- (e) The character of the market is often determined by the particular use to be made of the product.

### III. *In the case of the advertisements:*

- (a) The advertisements depend in selling the product exclusively on its utility and economic advantages.
- (b) The advertisements have peculiarities in form and substance in relation to the peculiar conditions prevailing in the case of the buyers and of the component markets to which the product is advertised.

### IV. *In the case of mediums:*

The comparatively small number of buyers, and the peculiar factors that define the distribution of these buyers, demand an entirely special application of the principles of choosing mediums.

## ECONOMICAL AND UNECONOMICAL ADVERTISING

Advertising as considered in this book is the advertising that can be done to sell the product either directly or in a way that supplements directly the work of the sales engineer or salesman. No attempt will be made to justify advertising as a means of reducing excess profits taxes; as a means of decreasing the turn-over in the company's manufacturing organization due to the effects on it of the advertising; as a complete means of "dominating" the market; as a means of putting the company in a position to sell its securities more readily; as a complete means of insuring future years' business; as a complete means of investment; as a complete means of coercing dealers, or other manufacturers (in the case where the product reaches the final consumer as a part of another manufacturer's equipment); or any other such means that are advanced as

highly advantageous uses of advertising, but which often are lacking in grounds to support them from a general economics standpoint, or from the plain dollars and cents standpoint of the manufacturer who pays the advertising bills.

 <p>Upson &amp; Deane Box, MAINE</p>	 <p><b>Shapers, Slotters, Etc.</b></p>	
<p><b>MATHES</b> H SWING FEET. <b>CO.,</b> MASS.</p>	<p><b>JONES &amp; LAMSON MACHINE CO.</b></p>  <p>SEND FOR CATALOGUE. SPRINGFIELD, VT.</p>	<p><b>NIC</b> Write fo</p>
<p><b>NE CO.</b></p> 	<p><b>THE NATIONAL Feed-Water HEATER.</b></p>  <p>A brass coil Heater delivering water to the boiler at 210° Fahrenheit. 800,000 Horse Power sold. Prices Low. Satisfaction universal.</p>	<p><b>"Victor and I"</b> Cutters in Round Steel. <b>FRANK</b></p>
<p><b>ANERS.</b> manship. <b>CO.,</b> MASS. D CUTTER.</p>	<p><b>THE NATIONAL PIPE BENDING CO.,</b> 82 River Street, NEW HAVEN, CONN.</p>	<p><b>OUR NEW And Supplied Chas. A. S.</b> During 2011 on allowance. \$15.00</p>

"Business cards" that appeared a generation ago.

Advertising, like any other force, increases in its effectiveness in proportion to its concentration directly upon the resistance to be overcome. This book interests itself in the intelligent, aggressive publicity that is concentrated directly upon increasing sales, that assists definitely in a rapid and healthy growth of the manufacturer's business, and that justifies itself on an economic basis.

## 14 GENERAL PROBLEM AND ITS ECONOMIC ELEMENTS

### THE PROBLEM TO-DAY, PRODUCTION; TOMORROW, SALES

It is commonly accepted that the men engaged in making technical products are in general more expert at making these products than in selling them. Their inherent interests in things technical lead them to focus their attention on the engineering and manufacturing departments

Way, New York.

**THE BATTERY**



44. The X and Y system.  
PATENTED.

**THE BEST  
QUIT BATTERY**

Get, without any question,  
THE BEST  
ING ALL OTHERS!

action, Battery Trouble and  
and more things of the past. As a  
**ONE BATTERY,**  
satisfactory 'extra' to others,  
usually used by the Telephone  
whole country.  
ed in its construction are the  
ids. No others. Great recipe  
telling to renew except the  
sides, no porous cup, glass or  
standard size battery-box.  
for and Schedule of Prices.  
1898.

and for sale by the  
**GRAPH COMPANY,**  
Street, New York.  
WILLIAM A. CHILDS, Manager.

429, 432, 434, 436 East Twenty-ninth St.,  
Office at the Works. NEW YORK CITY.

**CHARLES WILLIAMS, JR.**

(ESTABLISHED IN 1890.)

109 Court Street, Boston, Mass.

AUTHORIZED MANUFACTURERS OF

**THE AMERICAN  
BELL TELEPHONE CO.**



Magneto, Crank and Push Button Call Bells,  
Electric Bells, District Bells and Switches for  
Exchanges, Announcements, etc.

Telegraph and Electrical Instruments,  
Batteries, Wires, Insulators and Tele-  
phone Supplies of every Description.

**TELEGR  
CARE**

with Call representing an e  
Over 20 new designs, which, i  
selling at but a trifle above co  
Send 10 cents for samples and  
Straight Mathematical Ca  
Strait, pure white, with cut  
and address; 10 cents for 50.  
With every order is sent  
Card, extra size and thick  
with cut, and purchaser's na  
written.

50¢ If you are in need o  
card or stationary like with  
clashing elsewhere. The ha  
and finest work of least pr

If you wish to avoid your  
offer send your order at once  
Silver wrapped in paper will  
extra charge for address.  
cheerfully given.

**A. F. HU  
Baskirk,**

Just Published;  
**ELECTRIC ILLU**

GENERAL PRINCIPLES, CON  
DUCTORS, CAPACITORS,  
BRIDGE OF  
**JAMES DR.**

Quarto, 600 Pages, 50¢  
Cloth. Price

Orders promptly filled for  
other Electrical work sold  
Post-Office Order, Draft, Re  
Express Address,  
**W. J. JOHNSTON, F**  
No. 9 Murray St.

A specimen from old advertising pages.

of the business. The execution of the work in these departments is governed by highly scientific methods. The same cannot be said in general of the manufacturers' marketing and advertising practices.

In the early days of the life of a technical product that has been brought out to fill some engineering or industrial

demand the problems of the manufacturer are almost exclusively those of design and manufacture, those of production rather than distribution. But as the life continues and as the use of the product broadens, the conditions of the market and competition tend to standardize the design of the product, to increase competition by similar products, and to saturate the market for the product. As the catching up with the market sets in, the manufacturer's problems

**ONE**  
most  
proved lately.  
**LARK.**  
No Pumps; No  
in Warehouse.

phi.  
very Street.  
**NER.**

by York.  
Water.  
**Machine,**  
**MMER,**  
18,  
Avalon, Pa.

**CINCINNATI, O.**  
Manufacturers of Whipple's Patent Free Open Double  
Valve.  
**LEVER VALVE.**  
for Steam or Water, from 1½" to 6". This valve has  
particular merits as a throttle valve for steam engines,  
and is well adapted to the use of a Sawyer's Valve, in  
place of the latter. Send for our catalogue and  
price list.



For Heating and  
Purifying Water  
for Steam  
Boilers.  
**Wm. Alpa & Sons,**  
**WORCESTER, Mass.**

---

**"The Sweetland Chuck."**



**SWEETLAND & COMPANY.**  
120 UNION STREET, NEW HAVEN, CONN.

Universal,  
Independent  
and Accurate.

Unexcelled for Accu-  
racy, Strength, Durabil-  
ity and Simplicity of  
Construction.

---



**EMPIRE  
FORGES**  
Improved, without  
Rods, Bolts, Frank  
Lines, Good Fittings or  
Bark machinery. Metal for

**ENGRAVING ON WOOD**  
J.H. TUTTLE, 105 BEEKMAN ST. N.Y.  
**FOR SALE**

Old-fashioned advertising.

are made up more largely of sales and advertising elements. There then exists his problem of getting his share of the business in the market and of keeping his plant in full production.

Take, for instance, the cases of electric motors and farm tractors. Electric motors have become pretty well standardized as to design and manufacture. As the large companies have pretty well caught up with the market, the competition between the selling organizations for business is very keen. The methods used in advertising and selling electric motors are very highly developed. On the other



## TO EVERY ENGINEER WHO PLANS FOUNDRIES

**YOU** are, we take it, vitally interested in the construction of foundries. You have probably devoted a good share of your lifetime to the betterment of foundry working conditions, to the increasing of foundry production, and to the reduction of foundry costs.

It, therefore, seems somewhat strange to us that we have never been given the privilege of telling many of you what we have been doing in the foundry field ourselves—how we have been able, by co-operating with men like you, to share in this work of increasing foundry production, reducing foundry costs, and making foundry workers better satisfied and happier men and women.

We have been conducting a modest educational campaign through the advertising pages of the publications which reach the foundry field. Last year we used twenty-five pages to tell our story; this year we shall use more. We are,

of course, talking particularly about the possibilities of mechanical sand handling equipment, yet we are at the same time selling just what you are selling:

more carefully planned foundries;  
more human foundries;  
more profitable foundries.

We are both willing and able to co-operate with you and we ask merely the opportunity of showing you just what Bartlett and Snow Foundry Sand Handling Equipment has already accomplished and what it can accomplish.

You may be interested in a little bulletin which we have prepared and called: "The Economical Handling and Preparation of Foundry Molding Sand" which will give you a brief idea of the possibilities of mechanical sand handling equipment. If you are, we shall be glad to send you a copy, and we may tell you in advance that your request for a copy will be received with pleasure.

### THE C. O. BARTLETT & SNOW CO.

MAIN OFFICE AND WORKS: CLEVELAND, OHIO

Advertising the technical product in 1920.

hand, farm tractors are not very well standardized. There are a great many designs on the market on the date of this writing, April, 1920, and these designs vary considerably one from the others. The price range also is wide. Each tractor manufacturer is busy working out his particular design, and his production methods, and is doing the best he can to fill a market more or less hungry for tractors. As the designs and production methods become more and more standardized, and as the market is caught up with, the tractor manufacturer's problem will change somewhat so as to include more elements of selling and advertising.

The revolutionary increase in the use of machinery during the past few years, and the consequent enormous development of great organizations engaged in the manufacture and distribution of technical products have created big problems of distributing these products in such ways as will stabilize the production of the plants behind the products. The growth of these problems of distribution has enhanced the importance of advertising, because of its power to help in the solution of these problems. There is a determination existing among the men engaged in advertising technical products to get to the bottom of the whole advertising subject and to work out a solution of these problems along sound economic lines.

These men know that the problem of production to-day will be the problem of sales tomorrow.



## CHAPTER III

### THE ECONOMIC PROBLEM

Data on returns necessary—The engineer's opportunity—General economic problems of advertising—The economic problem and its elements—Explanation of the factors—Economic losses existing in present day practice.

#### DATA ON RETURNS NECESSARY

The economics of the problem demand that the manufacturer or his advertising manager approach the matter of advertising from the point of view that the money spent on advertising must show results, just as money spent in any other branch of the business must bring a definite, weighable return.

It is true that it is difficult, often, to forecast the results of a new campaign, but surely there are means available for checking the returns of the campaign after it has been operating for some time. An analysis of these returns can be useful as a means of deciding whether the campaign is paying or how it can be strengthened. Further, a persistent, conscientious search for all possible means of checking returns (not necessarily in the form of coupons), and a thorough, continuous analysis of these returns will bring out principles of cause and effect that are working in the manufacturer's advertising and that can provide a foundation for putting his advertising on a truly economical basis.

There is a great deal of talk in advertising circles about the impossibility of checking returns. Very well; if a thorough digging for returns of the advertising fails to reveal any, it safely can be taken for granted that there are not any worth while returns. In this case, the advertising practice should be changed.

The manufacturer seems inclined to think that advertising is a little deep for him. He is rather impatient at the technicalities of the work. He says, "Oh well, I guess advertising is a little over my head." He approaches and buys his advertising with rather a "blue-sky" attitude. This is not the right attitude. There is no reason why the business man selling technical products should not insist upon being sold actually the economics of any advertising plan that is presented to him. He will save a lot of money for himself and his company if he will make the advertising counselor stick to facts and discuss some concrete dollars and cents points in connection with the plan for advertising.

There is a great deal of looseness in the economic use of advertising due to the fact that the advertising man permits himself to become so inducted by the technique of advertising, matters of copy, typography, details of make-up, and organization routine, that his mind is taken and kept entirely away from the main purpose of the advertising, just as the nurse often becomes so involved in the transaction of her routine duties that she forgets her patients.

### THE ENGINEER'S OPPORTUNITY

The economics of advertising in relation to the economics of distribution will not be discussed here but some attention should be called to the opportunity of the engineer, who infiltrates the ranks of the men engaged in advertising the technical product, the opportunity to apply engineering, analytical and synthetical methods to the economic problems of distribution.

The economists point out to us that the cost of distributing merchandise has advanced out of all proportion to the cost of manufacturing it. There are certain mechanical or physical features to the problem of distribution that will come more under the influence of the engineer, and we may look forward to his providing certain physical improvements in the system of distribution that will enable us to accomplish distribution more efficiently and more cheaply.

Although the human elements in the chain of distribution including the jobber and retailer, are very important and are needed as intermediate steps to satisfy certain functions, on the other hand, there are certain physical features to the problem of distribution, such as the transportation, which is probably the most important, that can be put on a much sounder and a much more economical basis through the research of the engineer. Therefore, we can expect his greater engagement in distribution, and the consequent influence of his quantitative thinking on advertising and selling.

#### GENERAL ECONOMIC PROBLEMS OF ADVERTISING

It is not the intention of the authors to discuss here the economic factors relating to advertising in general. The general limitations of advertising, the responsibility of advertising for changing marketing practices, the advantage of the written over the spoken word, advertising as an economic distribution factor, and such other economic factors relating to advertising in general have been thoroughly discussed by able economists and analytical advertising men. For discussions of these general factors reference should be made to the standard works, such as *Advertising, Its Principles and Practice* by Tipper, Hotchkiss, Hollingworth, and Parsons. Attention will be given here only to some of the economic factors that are peculiar to advertising the technical product.

#### THE ECONOMIC PROBLEM AND ITS ELEMENTS

The economic problem is to deliver effective sales messages to real prospects for the product at a minimum cost per message delivered.

The fundamental factors to be considered then in working out the economics of the problem are:

1. The Product.
2. Real prospects for the product (The Market).

3. Effective sales messages.
4. Effective delivery of the message.
5. The cost per message.

#### EXPLANATION OF THE FACTORS

1. *The Product*.—All of the factors of the problem are functions of the particular product; they depend in their definition and evaluation, on all of the characteristics that are peculiar to the particular product.

2. *Real Prospects for the Product (the Market)*.—A real prospect is an individual who exerts a direct, considerable influence on the purchase of the product to be advertised. He is either a user of like products, or a potential user of such a product because it can serve him to economic advantage.

3. *Effective Sales Messages*.—An effective sales message is a communication delivered by the manufacturer to the prospect in such form and with such substance as will have power, by either its strength of argument or its strength of suggestion, to influence the prospect to buy the product. A series of such messages must cause a series of reactions in the mind of the prospect that will influence him so favorably toward the product that he will purchase the product directly or he will put forth little resistance to the efforts of the salesman who calls to secure his business.

4. *Effective Delivery of the Message*.—The effective delivery of the message consists in getting the attention of the prospect to the message under such circumstances as will secure his maximum concentration on it for a maximum time.

5. *The Cost per Message*.—The cost per message is arrived at by dividing the total cost of building and delivering the message by the total number of real prospects for the product to whom the message is effectively delivered.

The economic problem, with its factors as stated, is a summation of the entire problem of advertising the tech-

## 22 GENERAL PROBLEM AND ITS ECONOMIC ELEMENTS

nical product. The factors set down and defined will be expanded in the succeeding chapters as a means of offering suggestions for the correct methods of evaluating the factors in detail, and placing them in correct relation with one another for the final solution of the individual manufacturer's peculiar economic problem of advertising.

### ECONOMIC LOSSES EXISTING IN PRESENT DAY PRACTICE OF ADVERTISING TECHNICAL PRODUCTS

#### *I. Losses due to the manufacturer or his advertising department, caused by:*

1. Lack of analysis:
  - (a) of product for best selling points;
  - (b) of component markets;
  - (c) of the relation of the product to the respective markets, to supply material for the most powerful appeals;
  - (d) of all of the mediums available for carrying the message, and the possibilities of co-ordinating the use of several of these to establish a complete campaign;
  - (e) of the costs of advertising, and the results produced, to provide a basis for spending further money more effectively.
2. Too much attention focused on the product instead of on the service it performs.
3. Too little use of the dollars and cents appeal. This appeal is one of the strongest used in advertising general commodities. It is one of the oldest and most powerful appeals used in selling anything. The money appeal has been used very little in advertising technical products but it presents interesting possibilities.
4. Lack of knowledge of the psychology of the technical or professional buyers in the component markets.
5. Advertising in territories or to component markets for which no arrangements have been made for selling or distribution.
6. Lack of understanding of correct organization principles to insure effective work in the advertising department. The advertising departments of many large manufacturers specialize entirely on the functions peculiar to the execution of advertising detail and routine, such as copy, illustration, art work, type, but specialize not at all on the problems peculiar to selling the product or products to component markets for these products.

This condition of organisation is the cause of the appearance of such a great proportion of "blanket appeal" advertising, good advertising in form and appearance but almost powerless in sales energy.

7. Lack of sufficient contact between the advertising department and the field men. Too little observation in the field by the members of the advertising department.
  8. Lack of sales ammunition, of sales substance as a basis for building the messages.
  9. Lack of the carefully planned campaign, of which every message should be a part.
  10. Poor choice of the medium or mediums for delivering the messages.
  11. Lack of perception of the distinction of character of magazines, as expressed in their purposes, fields, and editorial services.
  12. Lack of follow-up, of sales-clinching messages to establish the value of the general advertising by bringing in the volume.
  13. Poor execution of direct mail; poor grade of mail pieces; faulty lists.
  14. Liberal and costly use of expensive space in popular magazines for indirect methods of advertising, without a balancing amount of time and money spent on the kinds of advertising that will clinch sales.
  15. "Dominating" advertising campaigns. It is possible for a manufacturer to dominate the market for a technical product, but not as the result of one big, "smashing" campaign in a popular magazine.
  16. The use of house organs that express too much "house ego".
- II. *Losses due to the mediums, caused by:*
1. The reduction of some trade and technical magazines to the category of directories, because of the great masses of advertising carried by individual issues.
  2. The lack of some means of getting the reader over into the advertising sections of the trade or technical magazines, some such means as the interpolation of editorial material with the advertising.
  3. "Special issues" of trade and technical magazines.
  4. Too many issues per year of magazines with little news.
- III. *Losses due to the manufacturer's counselors, caused by:*
1. The scarcity of counselors who are disinterested. The manufacturer's counselors are made up of two principal groups, the national advertising agencies and the advertising service departments of the publishers of the trade and technical magazines. There is a third very small group made up of the "technical agencies"; they are more truly

## 24 GENERAL PROBLEM AND ITS ECONOMIC ELEMENTS

disinterested parties, but so far their influence on technical advertising is very limited. The national agencies, of course, are interested in the promotion of advertising in the popular magazines because their commissions from these magazines are sources of income for them. The advertising service departments of the trade or technical magazines are interested in the promotion of advertising in their own particular magazines. It seems hardly accidental therefore that advertising should be highly developed in these two directions. Nor is it strange that the direct forms of following up the magazine advertising, the forms of advertising that concentrate directly on crystallizing the sale, have been developed slowly and at present get very little of the attention they deserve; there is a lack of organized effort to promote the intelligent use of such advertising; it is nobody's child.

2. The general lack of experience and knowledge of marketing technical products, in the national agencies that give counsel to the manufacturer on advertising in the popular mediums. There is a lack of adaptation of the principles of advertising to fit the conditions peculiar in general to advertising technical products and in particular to advertising the particular technical product to its component markets.
3. The making of the appeal in popular mediums to the average reader instead of to the average prospect-reader.
4. The specialization of many of the large advertising agencies entirely on the functions related to the physical factors of building advertisements instead of the specialization on individual products and their respective component markets.

## CHAPTER IV

### THE PRODUCT

Designing a product or changing it—The product and its use—Standardized product and specialty—Competitors' products—When to analyse—The factors to be considered—What the product will do is of importance, not the product.

#### DESIGNING A PRODUCT OR CHANGING IT TO FIT A MARKET

When the matter of analysing the product is presented it is usually assumed that the advertising man must accept the product exactly as it is and pick out from it whatever characteristics or features will make good selling points. In some cases, however, advertising men are permitted to suggest to manufacturers the specifications or characteristics of a product that they feel could be put on the market in a big way and as a big money maker. The manufacturer then equips his shop to make the product to meet the market suggested by the advertising man. Such a product of course is likely to be born with a heritage of good selling points and a line of least resistance for sales.

The average advertising man must accept the product actually as it is presented to him and do the best he can in his efforts to sell it. However, from the broad business standpoint it is obvious that the product should be analysed in relation to the various prospective markets, to uncover any possibilities of changing the form of the product, its dimensions, its construction, or its characteristics in some way, to make the product meet the market conditions better and to have it create for itself as little sales resistance as possible. A thorough study, in the field, of the service conditions governing the product will often suggest slight



changes in the design, dimensions, finish, limits, materials, that will broaden the market and reduce the sales resistance.

### THE PRODUCT AND ITS USE

The present discussion of analysing the product, however, is based on the assumption that the product will be marketed exactly as it is.

Analysing the product for advertising purposes is of course a matter of finding out the characteristics of the product in relation to its use in a particular field that will appeal most strongly to the prospective buyers in that field. A separate and thorough analysis of the product in its relation to each field should precede the advertising campaign for that field.

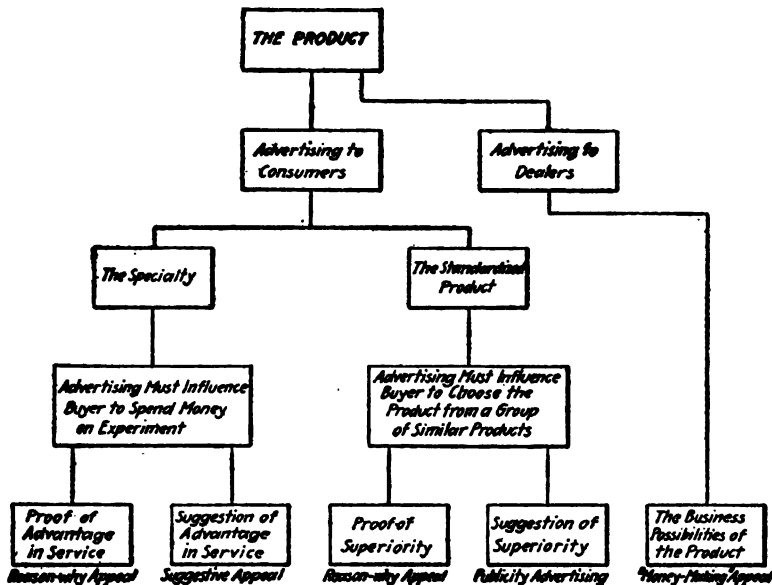
To write good copy for an advertising campaign, the writer should first saturate his intellect and senses with the product. He should analyse the product from every possible angle, its design, construction and operation, the conditions governing its manufacture, the conditions governing its use, its record in service, its history, the place of competitive articles in the market. He should start out with an appetite hungry for facts, and should satisfy this hunger before he writes a single advertisement.

Before the advertising man writes a single line he should know his product from the prospect's point of view. He should know every appeal that can be made effective with buyers and the relative weights of these appeals. He should know the things that could be said about the product that would create in the buyer's mind simply the reaction, "old stuff"—so that he can increase the effectiveness of the advertising by leaving these things unsaid. White space is more valuable than the old, worn-out "quality" talk.

### STANDARD PRODUCT AND SPECIALTY

In discussing the analysis of the product, the authors are making use of the terms "standardized product" and "speci-

ality". By a "standardized product" is meant the product whose general design, construction and operating characteristics conform to the standard practice governing like products used in the applications for which the product is sold. By a specialty is meant a product that is new to the industry, application, or territory; it is considerably different in design, construction and operating characteristics from the machines or tools employed at the time in ac-



The various appeals, based on the analysis of the product. (Suggested by a similar chart published by the A.W. Shaw Company.)

complishing a parallel purpose; it serves a purpose that is peculiar to its own design and construction.

The sale of a standardized product must be promoted by meeting all the various phases of competition. The prospect accepts the general form and material of the product because he is already familiar with similar products through using them, but he must be convinced that the particular product will cost him the least per unit of satisfactory service.

The sale of a specialty must be advanced by educational work concentrated on the service of the product. The prospects must be convinced that they need the product.

Industrial power trucks are still very much of a specialty. One of the largest manufacturers of these trucks says:

"The sale of industrial trucks is educational and seldom competitive. Of course our competitors come in on all big deals but most of the prospects have to be sold on the fact that they either need or can use trucks. They do not come asking for them unless they already have one truck in operation, and are familiar with the saving that can be accomplished by means of it."

A glance at the advertising pages of the technical magazines will prove that some advertising men shoot rather widely of the mark in advertising a specialty. It is very common to see a specialty presented with the entire advertisement concentrated around a description of the specialty, and its construction, and its quality. The advertisement really should be built up to show the service that the article can perform. It should show the cost of the service, and any economies of time or money resulting from its use.

Advertising that concentrates its attention on the product itself and neglects the service features that might appeal more strongly to the buyer is weak enough in the case of standardized products. In the case of specialties it is extremely weak.

A product may be standardized in one direction, in one industry, in one class of application, in one territory, and a specialty in another. Bearing practice in the motor truck and automobile industries is standardized on anti-friction bearings. Most tractors employ anti-friction bearings liberally. However, anti-friction bearings are still a specialty to the manufacturer of agricultural implements. Farm tractors have become adopted so generally in some territories that the farmers in the particular territory need no longer be sold on the advantages of a tractor as compared with the horse; the manufacturer must

sell him his particular make of tractor; farm tractors have become *standardized* in these territories.

### COMPETITORS' PRODUCTS

The analysis of the product should be followed by a thorough analysis of competitors' products and the advertising that is being done on these. What other product is making the best progress in the market and why? Be frank in the matter and try to provide yourself with the right reason—is it because of the inherent merit of the product or because of the use of correct appeal in the advertising and selling? Do not be above learning a lesson in advertising from a successful, aggressive competitor.

It is particularly important to study competitors' products before laying out the advertising campaign for a highly standardized product.

### WHEN TO ANALYSE

The analysis of the product should precede the beginning of the campaign. What the analysis reveals is an important consideration in planning the campaign. And all of the treatment of the advertising messages should be based on the facts brought out in the analysis of the product.

Do not follow literally that old, worn-out little command that has been handed out so long by the advertising high-brows, to wit: "Visualize your customer." That is, do not try to visualize him from your desk. Go out into the field, shake his hand, talk with him, get him to talk, *know him*. You do not have to "visualize" your boss. You *know* him, because you are selling him your services every month. Know your customers. Know them in every field before you start advertising your product to that field. Any analysis you make is worthless unless you analyse your product in relation to the service the customer gets and expects of like products.

## THE FACTORS TO BE CONSIDERED

The following are suggestions of factors to be considered in making an analysis of the product. Every product and the markets for it of course have their own peculiarities. Every factor that might influence the advertising of the product in these markets should be dug up and weighed carefully.

*I. The factors of the product:*

1. Price
2. Design
3. Is it a "standardized product" or a "specialty"?
4. Materials
5. Construction
6. Conditions governing manufacture
7. Operating characteristics
8. Unusual features
9. Appearance
10. Tests
11. Durability
12. History
13. Weight
14. Size or space required
15. Freight

*II. The factors of the service of the product:*

1. Effect on production
2. Quality of work done by product
3. Effect on labor
4. Convenience in use
5. Cost per unit of service
6. Savings made
7. Conditions governing service
8. Features that make product superior under such conditions
9. Service records
10. Range of service
11. Single purpose or combination of functions
12. Cost of maintenance
13. Attention required in service
14. Tests
15. Application to other products as an integral part of them
16. Complete unit, of which product is a part; as in the case of a belt conveyor, of which the conveyor belt is a part

17. Engineering service available for installing and maintaining the product

*III. Factors of competition:*

1. Competitors' products
2. Service of competitors' products

*IV. The factors that interest the dealer:*

1. Business proposition
2. Service of the product
3. Product

**WHAT THE PRODUCT WILL DO IS OF IMPORTANCE,-  
NOT THE PRODUCT**

In analysing the product in relation to the service it performs, a careful study should be made of the service in each field in which the sale of the product is to be promoted. Before the advertising campaign covering the particular field is begun there should be at hand complete data on the conditions governing the use of such a product in the field, the records of service of the product in that field, the point of view of the field governing the purchase and use of such a product, the records and service of parallel products in the field. A feature of a manufacturer's product that is important in one field may be of no importance whatever in some other field. For instance, the friction element of bearings for belt conveyors is highly important because the friction of the bearings has a direct relation to the thickness of the belt needed, the horse power of the driving motor, and other elements of the design of the conveyor. But in the case of bearings for plate mills in steel plants, the friction of the bearings has no importance at all; the bearings must stand up under heavy shocks and loads, and must have the capacity for performing constantly with a minimum of attention.

Technical or professional buyers are generally well able to judge of the merits of construction of the product but it is very common in technical advertising to over-estimate

the interest of the buyer in the elements of construction. He can be sold very much more easily by telling him what the product will do than by describing for him the elements of design and the methods of manufacture. The buyer of belting for instance thinks of a belt as a band that is used for connecting two pulleys mounted on separate shafts and transmitting the power from one to the other. He is interested in buying bands of the necessary strength for this purpose that will operate with the least amount of attention, last the longest, and cost the least per unit of service. The buyer of a line-shaft bearing thinks of a bearing as a means of supporting his line-shaft. He will employ the means that insures no shut-downs of the shaft due to that means, that costs least to buy and operate, that demands the least attention and lubrication, and that wastes the least power.

Details of design or manufacture can be used effectively to show why the product has certain superior operating characteristics, but these details alone are not likely to interest the buyer.

A demonstrated or proved effect on production is the most powerful selling point that can be presented for a product. *Prove* to a prospect that your product can increase his production or insure the continuous operation of some unit in his production system and he will buy. In analysing your product, therefore, make an intense study of its relation to the problems of production of the various groups of prospects to which your product is to be advertised and sold.

Calling the reader's attention to the service of the product rather than to the product itself is particularly important in magazine advertising because of the limited space. In the forms of advertising that afford more extended space, such as folders, bulletins, prospectuses, there is room to describe also the design and construction of the product so that the technical buyer who happens to be interested in making comparisons on these points with the products of other manufacturers will have the information at hand.

But in advertising in the magazines it is a pretty safe rule to stick to emphasizing the service features of the product.

Technical advertising is too full of what we might call "product-ego". The advertising is too well sprinkled with superlatives applied to the product, the plant, and the manufacturer. This makes good reading for the manufacturer's business family, but it does not sell the product.

The technical or professional buyer is interested in what the product will do, the price of the product, the cost per unit of service. Base your analysis of the product on a search for facts that will appeal to the buyer in these directions, for facts that will actually sell the product. Know your product. Know what your product can do and has done in service. And prove it in your advertising.



## CHAPTER V

### THE MARKET FOR THE PRODUCT

**Better standards needed in market analysis—The component markets—Analysing the market and the component markets—Estimating the size of the market—Sources of information—The sales engineer's territory.**

#### BETTER STANDARDS NEEDED IN MARKET ANALYSIS

It is important, of course, to analyse the product, but it is more important to make a thorough analysis of the market for the product. This analysis will not only develop certain fundamentals that will provide a basis for the correct solution of the general problem of advertising the product to the market but it will supply valuable indices of the best appeals to be made in the various messages that are to be delivered to the component groups of the market.

Much market analysis is done about as thoroughly as the school boy calculated the distance to the moon. His explanation of his calculation was this: "I guessed that one fourth of the distance must be at least a million miles, and by multiplying 1,000,000 by 4, I arrived at the correct distance, 4,000,000 miles."

It is strange that the marketing of technical products has not been developed more rapidly as a science, that there should be lacking in its practice the scientific methods that are used in their design and production. The sales and advertising departments connected with the manufacturers of technical products are infiltrated with engineers. Are they blind to the possibilities of applying to the problems of distribution, of selling and of advertising, the

same principles of research that they learned and practised in their earlier engineering training and experience?

A machine or tool is needed by a manufacturer to increase the effectiveness of some link in his production chain; or a product is needed to fill some void in the market; or some process can be improved by introducing a new element that will make some unit of the process function more efficiently. The engineers are called in. The problem is explained to them. They study it from every conceivable angle. And they proceed with deadly sureness to evolve the new machine, or the new product, or the new element in the process. To-day invention is a science. Engineering and production are governed by scientific methods. The gaps between science and industry have been pretty well bridged over.

A development of the reasons for the discrepancies in the standards of methods governing production on the one hand and distribution on the other is outside of the scope of this book. The emphatic point at hand, however, is this: The engineers employed in the activities that are a part of distribution owe it to themselves, to their employers, and even to society to tackle aggressively the problems of distribution with the scientific point of view. There are at hand wonderful opportunities to effect revolutionary improvements in the methods and costs of distribution by the rigorous application of the methods of the laboratory. There, accurate results are insured: by an infinite patience in making long series of observations; by establishing, by means of these observations, the facts; and by basing rules of practice on these facts.

Engineers engaged in the work of advertising the technical product carry a responsibility to their co-workers to blaze the way in providing scientific methods for the solution of such problems as analysing the market. Once such methods are standardized (they can be standardized only as to principles, of course), the influence of these scientific methods will infiltrate itself into other closely allied practices, and finally into the broader practices of

advertising, selling, and distributing general commodities. And a constructive beginning will be made in the direction of lowering the costs of distribution.

A broad, preliminary analysis of the product, the market, and the best methods available for selling this market by means of advertising is the only safeguard against a waste of money caused by low-efficiency advertising. The salesman who fails to interest the buyer knows why, because the buyer tells him why. But there is no such day-to-day check on advertising. A poorly planned advertising campaign carried out on a lot of false assumptions, or, as is more often the case, on no consistent assumptions at all, runs along all year without hurting anybody's feelings. The manufacturer winces occasionally, when he pays the bills, but somebody has sold him pretty well on a "big idea", or on "dominating" the market, or on one of the other deep and highly technical advertising arguments that are used as ammunition when the batteries are trained on a series of double-page spreads. He sighs as he pays the bills, admits to himself that he does not understand advertising, and hopes that, after all, it will come out all right.

### THE COMPONENT MARKETS

In advertising and selling technical products the market can be defined as the summation of the groups or prospects who can make an economical use of the product. In making the market analysis, therefore, it becomes necessary to analyse the various groups of the market, independently and thoroughly. The factors set down here as entering into the general problem must accordingly be solved for in each group, as a preliminary to building a summation that will express the general sales possibilities for the product and the facts that must be used as a basis for building the sales and advertising policies.

In the case of a technical product the complexion of the market in one group may be entirely different from the complexion of the market for the same product in another

group. This group is usually defined by the limits of the application of the product in various ways or by the limits of the use of the product in various industries.

In analysing the market for goods of general consumption limited numbers of individuals can be picked from certain types and from certain classes, and their needs and desires can be studied to provide averages. The total numbers of prospects in the various types and in the various classes can then be estimated from the statistics available for the country, the states, the territories. The market of course is a function of these numbers and the averages.

In analysing the market for technical products, however, the factors to be evaluated are buried a little deeper. The principles of analysis are the same but it is necessary to dig further for the facts.

The first step in analysing the market for a technical product is to divide the whole market into component markets. The principle to follow in defining a component market is to limit it in such a way as to make it possible to attack it with a concentrated appeal.

#### THE FACTORS THAT DEFINE THE COMPONENT MARKETS

The following are some of the factors that should be considered in defining the component markets:

- I. The industries to which the product is suitable.
- II. The sub-divisions of these industries.
- III. The various applications of the product in these sub-divisions of the industries.
- IV. The channels through which the product reaches the user (Through dealers, or through another manufacturer who resells it as an integral part of his machine direct to the user or through dealers to the user).
- V. Buying habits.
- VI. Territories.

## ANALYSING THE MARKET AND THE COMPONENT MARKETS

Some of the factors to be considered in analysing the market for a technical product are:

1. To what groups of the market, classified by subdivisions of industries, is the product
  - (a) A standardized product?
  - (b) A specialty?
  - (c) Partly standardized and partly a specialty?
2. To what groups of the market, classified by territories, is the product
  - (a) A standardized product?
  - (b) A specialty?
  - (c) Partly standardized and partly a specialty?
3. To what groups of the market, classified according to applications of the product, is the product
  - (a) A standardized product?
  - (b) A specialty?
  - (c) Partly standardized and partly a specialty?
4. What groups of the market present in prospect the least sales resistance, measured by:
  - (a) The suitability of the product for a group?
  - (b) The economies that can be accomplished by the product for the members of the group?
  - (c) Buying habits of the group?
5. Volume:
  - (a) By groups, according to industries and subdivisions of industries.
  - (b) By groups, according to territories.
  - (c) By groups, according to applications of the product.
  - (d) The increases and decreases in the volumes in these various groups plotted for a period of years, to show volume tendencies.
  - (e) The volumes plotted against index curves showing the activities of the various groups themselves for the corresponding periods.
6. The price of the product:
  - (A) In the case of a standardized product in relation to the prices of competitors' similar products on the market.
  - (B) In the case of a specialty—
    - (a) in relation to products accomplishing the same general purpose.
    - (b) in relation to economies that can be effected by the product.
  - (C) Territorially.
  - (D) Freights, warehousing costs, and other costs of the physical factors of delivering products to purchasers' plants.

7. The buying powers that influence the purchase of the particular product:

I. In the case of a product sold to another manufacturer to be built into his machine and sold as an integral part of it:

- (A) The manufacturer (who buys the part)
  - (a) His engineering department
  - (b) His production department
  - (c) His purchasing department
  - (d) His sales department
- (B) The dealer (who sells the machine)
  - (a) The dealer
  - (b) His salesmen
- (C) The consumer (who uses the machine)

II. In the case of a product sold to a dealer for resale to the customer:

- (A) The dealer
  - (a) The dealer
  - (b) His salesmen
- (B) The consumer

III. In the case of the product sold direct to the user, usually an organization:

- (A) The President
- (B) The General Manager
- (C) Other Officers of the Company
- (D) The Superintendent (Production Department)
- (E) The Chief Engineer (Engineering Department, Master Mechanic).
- (F) The Purchasing Agent

8. Territorial distribution of the prospects.

If the market is rich in some territories and very lean in others, the lean territories will not be covered by salesmen. And if the product must be sold actually by salesmen, then, obviously, advertising in such lean territories causes a waste of money.

9. The degree to which various geographical centers are saturated with prospects.

The well saturated centers of course offer attractive possibilities for the concentration of sales and advertising attack, with a consequent high selling efficiency.

## 40 GENERAL PROBLEM AND ITS ECONOMIC ELEMENTS

### 10. Successful competitors

- (a) Relative strength in various groups
- (b) Relative strength in various territories
- (c) Marketing practices
- (d) Advertising
- (e) Prices
- (f) Selling points

11. Is it a dealer proposition? (For sub-factors of this factor see chapter on Dealer Co-operation).

12. Engineering service necessary to sell and maintain "service" on a product.

13. Is it a "Repeat-order" product?

- (a) Life in service
- (b) Accessories and supplies
- (c) Repairs

14. Average amounts of individual purchases.

15. Average amounts of total purchases per year per buyer.

16. How often does the average purchaser buy per year?

17. When does the purchaser buy?

18. Relation of the purchaser's buying time to his business activities that can be watched by an outsider.

19. The relation of the cost of selling and advertising to the volume in the various groups.

## ESTIMATING THE SIZE OF THE MARKET

The definition of component markets is infinitely simpler than the determination of size. It is not difficult, with a good knowledge of the product and what it will do, to think of its possible uses. New uses continually suggest themselves automatically. The total market may never be completely covered, but the more important branches will surely come to the top in the course of the investigation work. By far the greater part of the analytical work lies in the estimation of size.

The natural thing to do first is to separate the market into general groups, arrange these groups as nearly as possible in their order of size, and attack the largest groups first as the most worth while markets.

The estimation of relative size may be based upon some

figures, easily obtainable for a given industry and having some relation to the technical product in question. For example, in the case where an anti-friction line shaft bearing, (one of whose chief advantages is power saving) is being considered, "Cost of Fuel and Rent of Power," can be found in the U. S. Census of Manufactures for the various industries.

What is desired now is an estimate of how many units of the product can be sold in these various groups. It is well to consider here what the limit of accuracy is. It varies with the difficulty of the investigation and the method pursued. A discussion of several methods in connection with this factor of "accuracy" seems in order.

*A Few of the Possible Methods.*—In the case of the technical product, we can put aside mail investigations. The problem is usually too involved to be handled in this way.

This brings us to the use of personal investigators. The most accurate method would seem to be an estimate on each plant by an investigator. But experience has shown that even with careful routing and every economy of time it is impossible to average more than 1.7 plants per day per investigator. This is a little over 500 plants per year per investigator; hence, if there were 10,000 plants involved it would take a force of twenty men to complete the work in a year. So, even with a relatively small investigation the expense would be disproportionate.

The data available through associations, the Census, trade papers and such agencies are always very general in character; hence, only very rarely can the market for the product be estimated from the results of previous outside investigation work. Personal investigation of the plants seems absolutely necessary if any degree of accuracy is to be obtained.

*The Sampling Method.*—What is known as the "Sampling Method" offers a fair degree of accuracy with a sensible outlay of time and expense. In this method each main group of industries is subdivided into groups small enough



## 42 GENERAL PROBLEM AND ITS ECONOMIC ELEMENTS

so that conditions within the "sub-group" are uniform. For instance, the general group Textile Mills might be subdivided into Silk Mills, Cotton Mills, Woolen Mills, etc.

It is perfectly possible from such agencies as trade papers, trade and manufacturing associations, special list compiling organizations (such as Thomas' Register, Boyd's City Dispatch, Davidson's Textile Blue

## REPLACEMENT TRANSMISSION INVESTIGATION

Name of Company-\_\_\_\_\_ Date - \_\_\_\_\_

Address - \_\_\_\_\_ Sent by- \_\_\_\_\_

Men interviewed- \_\_\_\_\_

Number Employees- \_\_\_\_\_

Product & Yearly Value of- \_\_\_\_\_

Capital Invested- \_\_\_\_\_

Number of Bearings, kinds, sizes- \_\_\_\_\_

Name & Type of Hangers- \_\_\_\_\_

Spacing- \_\_\_\_\_

Grade Shafting- \_\_\_\_\_

Types of Drive & Size of Units- \_\_\_\_\_

Total Power- \_\_\_\_\_

Percent in Drive- \_\_\_\_\_

Time & Cost of Oiling- \_\_\_\_\_

Time & Cost of Repairs- \_\_\_\_\_

Remarks- \_\_\_\_\_

**Figure 1.**

Book, and others) to get fairly accurate lists of plants in each sub-group, with more or less comprehensive data on each. Selection is then made of five, ten, fifteen, or twenty, perhaps more, representative plants from each sub-group. The number to be sampled depends upon the apparent size of the group and the limits within which conditions in the group seem to vary. These plants are to be carefully studied by the investigators with the purpose of establish-

ing "constants" or "factors" which can be applied to all the plants in each sub-group. The theory is perfectly sound provided the conditions in a given group are uniform and proper care is taken to pick representative plants. It is at this point in the investigation that experience and judgment are most needed.

*Report Sheets.*—The test plants having been selected and the investigators properly drilled and routed, a special report sheet should be put in their hands covering the points of information needed. A good deal of care may well be spent in the preparation of this report sheet. One necessary item omitted will cause serious trouble later on.

A sample report sheet used in an investigation of this kind is shown in Figure 1. Besides the number of units of the product (in this case, bearings) it was desired to know the prevailing sizes, the types already in use, etc.

Also, instead of establishing only one "factor" such as the "Number of Bearings per Horsepower Used", it was decided to develop factors based on "Capitalization", "Number of Employees", and "Value of Products". Therefore, these items appear on the investigation report sheet.

*The Problems of the Investigator.*—Since the accuracy of the test data turned in has such a great influence upon the final results, the work of the investigators should be carefully watched. All sorts of errors creep in. It is surprising how few concerns actually have statistics on their own plants. Relatively small difficulty is experienced by the investigators in obtaining interviews. The chief difficulty is in inducing the man interviewed to give accurate data instead of calling on his uncertain memory supplemented by his imagination. Sometimes it is possible to check the data by getting several opinions and on rather rare occasions there comes an opportunity of going through the plant for a thorough personal investigation. A great deal might be written from the school of experience on this part of the investigation work.

# 44 GENERAL PROBLEM AND ITS ECONOMIC ELEMENTS

INDUSTRY	NUMBER DEAR'S	TEST PLANT FIGURES				FACTORS			
		CAPITALIZ- ATION	HORSE POWER	VALUE OF PRODUCTS	EMPL- OYES	NO. CAP	NO RE	NO EMP	NO VAL PROD.
AGRICULTURAL MACHINERY									
Total Average									
AUTOMOBILES									
Total Average									
OUTLERY & TOOLS									
Total Average									
MACHINERY GENERAL									
Total Average									
HOSIERY & KNIT GOODS									
Total Average									
COTTON GOODS									
Total Average									
SILK GOODS									
Total Average									
WOOLENS & FELT GOODS									
Total Average									

Figure 2.

*Arrangement of Data.*—As the data come in they are entered on the tabulation sheets. Examples of these sheets are shown in Figures 2 and 3. As the figures accumulate in their proper columns, it is certain that inconsistencies will show up. An important part of the work is to take these up one by one to find the causes. This usually adds considerably to the store of knowledge and leads in some cases to the rejection of data, which must then be supplemented by investigation on other concerns.

Figure 2 shows how the four "factors" are developed from the original data. The development of the factors is simple. Figure 3 carries on the calculations from the factors to the final estimate of the number of bearings. The factors developed by studying the "sample" plants are used to multiply their corresponding figures for the whole industry. These industry figures may be taken from the Census of Manufactures of the U. S., or from data obtained from trade papers, associations, or whatever source seems best.

The Census figures are usually as accurate and useful as any, except in some special cases. Of course there are inconsistencies, and duplications and other inaccuracies in its figures. However, the investigator must understand the limitations of market analysis. He has available more complete and accurate data for this sort of work in the United States probably than in any other country. (It may be interesting to know that the 1920 Census of Manufactures will be much more complete in its classifications and therefore much more useful than ever before.)

*Arriving at the Final Estimate.*—Arriving at the final estimate necessitates checking the four separate estimates against each other and is rather involved. Some strange and very interesting things are brought to light in the process. As an instance, considerable variations are certainly to be expected between the number of bearings estimated on the four different bases. But when the variation is consistently 45 per cent., it often leads into an intensely interesting pursuit of the reasons. Occasionally,

MACHINERY	RENT OF FUEL COST POWER	GENSUS FIGURES			FACTORS			TOTAL ESTIMATED BEARINGS			ARREST			FUEL EST. NO.
		H. P.	WAGE CAPITAL EARN'S	PROD.	H. P.	WAGE CAPITAL EARN'S	PROD.	H. P.	WAGE CAPITAL EARN'S	PROD.	W	M	A	
Agricultural Implements														
Automobiles														
Carrriages, Wagons and Materials														
Cutlery & Tools														
Fire Arms and Ammunition														
Foundry and Machine Shops														
Sewing Machines, Cases & Attachments														
Silver Ware and Plated Ware														
Typewriters and Supplies														
Cash Registers and Calculating Machines														
Total														
TEXTILES														
Carpets, & Rugs other than Rag.														
Cotton Goods														
Hair, Fur and Felt														
Hosiery and Knit Goods														
Silk Goods, Including Throwsters														
Woolens, Worsted, Felt, Goods, Hats														
Total														
LUMBER														
Boxes Packing and Cigar														
Cooperage & all not elsewhere specified														
Furniture and Refrigerators														
Lumber & Timber Products & Planing Mills														
Wood, Turned and Curved														
Total														

Figure 3.

<b>FOOD PRODUCTS</b>									
Bread and other Bakery Products									
Canning and Preserving									
Flour and Grain Mills									
Food Preparations									
Smuggling and Meat Packing									
Sugar Refining									
Total									
<b>CHEMICAL AND ALLIED</b>									
Cement									
Chemicals									
Fertilizers									
Lime									
Paints and Varnish									
Explosives									
Total									
<b>PAPER</b>									
Boxes, Fancy and Paper									
Paper and Wood Pulp									
Other Paper Goods									
Total									
<b>RAILROAD SHOPS</b>									
Cars and General Shop Construction and Repairs by Great R.R. Companies and Gen. and Gen. Shop Companies and Roads by Great R.R. Companies									
Cars, Steam R.R., not including operations of R.R. Companies									
Cars, Electric R.R., not including operations of R.R. Companies									
Total									
<b>LEATHER</b>									
Boots and shoes									
Leather Goods									
Leather, Tanned, Curried & Finished									
Total									

Figure 3.—A continuation of the form on the opposite page.

INDUSTRY (MACHINERY)			BEARING SIZES			INDUSTRY (TEXTILES)			BEARING SIZES			MACHINERY			TEXTILES			TOTAL			PER CENT		
AGRICULTURAL MACHINERY						HOSIERY & KNIT GOODS																	
AUTOMOBILES						COTTON GOODS																	
Total Average						Total Average																	
OUTLERY & TOOLS																							
Total Average																							
MACHINERY GENERAL						SILK GOODS																	
Total Average						Total Average																	
Sum Total						WOOLEN & FELT GOODS																	
% of Total						Total Average																	
						Sum Total																	
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**Figure 4.**

when the investigator would be reconciled to a wide variation, the estimates check, perhaps within 20 per cent.

INDUSTRY	PLAIN	RING OILED	ANTI- FRAC- TION	INDUSTRY	PLAIN	RING OILED	ANTI- FRAC- TION
AGRICUL- TURAL MACHINERY				HOSIERY & KNIT GOODS			
Total							
Per Cent				Total			
				Per Cent			
AUTO- MOBILES				COTTON GOODS			
Total							
Per Cent							
CUTLERY & TOOLS							
Total							
Per Cent							
MACHINERY GENERAL				Total			
				Per Cent			
				SILK GOODS			
				Total			
				Per Cent			
				WOOLENS & FEBT GOODS			
Total							
Per Cent							
Sum Total							
Per Cent							
				Total			
				Per Cent			
				Sum Total			
				Per Cent			

Figure 5.

In arriving at the final estimates, it is reasonable to expect an average of the four separate estimates to be more



accurate than any one estimate by itself. And a little experience usually leads to the conclusion that a *weighted* average is better still. Study of the relative value of the factors as indices will usually determine the relative weight to be given each in the final average.

INDUSTRY		HORSEPOWER					INDUSTRY		HORSEPOWER				
	ENGINE	INDIV- DUAL	GROUP	TOTAL	GROUP UNITS		ENGINE	INDIV- DUAL	GROUP	TOTAL	GROUP UNITS		
AGRI- CULTURAL MACH'RY						HOBILERY & KNIT GOODS							
Total Per Cent						Total Per Cent							
AUTOMO- BILES						COTTON GOODS							
Total Per Cent													
OUTLERY & TOOLS													
MACH'RY GENERAL						Total Per Cent							
						SILK GOODS							
						Total Per Cent							
Total Per Cent						WOOLENS & FELT GOODS							
						Total Per Cent							

**Figure 6.**

*Other Points to be Covered.*—Market analysis of course covers more than the estimate of the number of units of the product. Prevailing sizes, resistance to sales, easiest points of attack, advertising mediums to use, the men necessary to sell—these are some of the points it may take up. Figures 4, 5, 6, and 7 show some of these interesting phases of the particular investigation used as an illustration.

Figure 4, arranges the investigation data so as to show the predominating sizes of the product in the various in-

dustry groups. It starts in by giving the size distribution. Then it narrows down to a tabulation showing how the sizes rank in two of the main groups (Machinery and

	BRANCH OF INDUSTRY	TOTAL H.P.	TOTAL COST OF POWER	PROP COST PER H.P.YR.
MACHINERY	Agricultural Impl.			
	Automobiles			
	Carriages, Wagons, and Materials			
	Cutlery & Tools			
	Fire Arms and Ammunition			
	Foundry and Machine Shops			
	Sewing Machines, Cases & Attachments			
	Silver Ware and Plated Ware			
	Typewriters and Supplies			
	Open Keyboards and Calculating Machines			
	Total			
	Average			
TEXTILES	Carpets & Rugs other than Rag			
	Cotton Goods			
	Hats, Fur and Felt			
	Hosiery and Knit Goods			
	Silk Goods, including Throwsters			
	Woolens, Worstedes, Felt Goods, & Hosi			
	Total			
	Average			
MACHINERY	General Machinery			
	Cutlery & Tools			
	Automobiles			
	Agri. Implements			
	Total			
TEXTILES	Cotton			
	Silk			
	Hosiery and Knit Goods			
	Wool			
	Total			
	Average			

Figure 7.

Textiles). Lastly it lists the sizes in their order of rank as the market investigation shows them, comparing this with the size ranking on the basis of previous sales.

Figure 5 shows the distribution of the three main types of the product among the industries. It gives an idea as to the "degree of saturation" of the markets from the standpoint of the anti-friction transmission bearing. Also, the nature of the "competition" is brought out.

In Figure 6, there is an analysis of the prevailing types of drives used in the various plants. This information is of importance in formulating the sales plan and the sales arguments. It also gives an insight into the relative strength of the sales appeal of the product in the various fields.

As another interesting side of the investigation, there is in Figure 7, an analysis of the cost of power in the various industries investigated. This also helps in determining the relative strength of the product's appeal in the different markets.

*A Rational Method.*—The method described above is economical in time and expense. Considering the ultimate limit of accuracy possible in this kind of work, it produces satisfactory results. A market containing 108,500 plants was covered in seven months by the use of only one investigator.

#### SOURCES OF INFORMATION

One of the important parts of market analysis is the study of sources of information. A definite limit is set on the extent and usefulness of the analyses by the amount, specificness, and accuracy of the information available. While in the United States there are probably more data available than in other countries, they are limited enough and casual enough to constitute a decided handicap.

This makes it all the more necessary to study what there is—to know where to go for it, and how much discretion must be exercised in the use of it. Perhaps the biggest advance in market analysis work will come with the development of comprehensive and accurate data with which to work.

*A Sense of Proportion.*—Perhaps the most valuable faculty the market analyst can develop in himself is a good sense of proportion. If he has this sense well developed, he will know how to use his data, how far it is profitable to go with any calculations, and can in the end draw reasonable conclusions on which it will be safe to base the large expenditures of effort and dollars to be put forth by the sales and advertising departments.

### THE SALES ENGINEER'S TERRITORY

The sales engineer's analysis of his own territory is a reduced cross-section of the general market analysis.

In making his analysis the engineer can first consult a list of the industries in his territory, such as a report of a Chamber of Commerce or State Reports. This work should not take much of his time, because the most valuable work will be done by scouting over the territory, following the list, and "chasing smoke-stacks".

He first will search for the prospects who can derive the greatest benefit from the product, keeping in mind the volume of business to be secured. While this investigation is being made he can work up a list of these prospects with all of the necessary names and titles of the buying powers at each plant. At the proper time, then, he will have a complete and accurate list for use in conducting a direct-mail advertising campaign to parallel his sales efforts. At the same time, he also will be collecting some very valuable sales ammunition.

## CHAPTER VI

### ADVERTISING THE PRODUCT TO THE MARKET

Two principal factors—Preparing the ideal advertisement—The advertisement must be correct technically—The psychology of the market group—The territory without salesmen—The dealer product—Fitting advertising into a marketing plan.

#### TWO PRINCIPAL FACTORS

In one of the previous chapters the economic problem of advertising the technical product was defined as the problem of delivering effective sales messages at the minimum cost per message delivered to real prospects for the product.

An element in this problem is advertising the product to the market. This element has two principal factors:

I. The use of the most powerful appeals to the particular market or group of prospects to which the messages are to be delivered.

II. The correct choice of mediums that reach the particular group of prospects to which the appeal is to be made, and that provide a minimum cost per unit prospect reached effectively by the mediums.

The first factor, (I), can be broken further into the following sub-factors:

(a) *Fitting the advertising to the product:*

1. Standardized product.
2. Specialty.
3. Dealer proposition.

(b) *Fitting the advertising to the market:*

1. The best appeals to the particular market.
2. The correct point of view for the particular market.
3. The service of the product in the particular market.
4. The psychology of the market group.

5. Geographical or territorial considerations that affect appeal.
6. The dealer's point of view.

The second factor, (II), involves a consideration of:

- (a) The various mediums available for carrying the message to the particular group of prospects to whom the message is to be delivered.
- (b) The cost per unit prospect that can be reached effectively by the various suitable mediums.
- (c) Suiting the form and appeal of the particular message to the medium used for delivering the message.

### PREPARING THE IDEAL ADVERTISEMENT

The ideal advertisement probably should be the result of the co-operative work of individuals in the manufacturer's sales, advertising, and engineering departments. The salesman or sales engineer who is selling the product in the particular field to which the message is to be addressed could furnish the sales ammunition for the advertisement. He could supply the appeal; he could suggest the photographs; and he could check the technical accuracy of the advertisement in respect to the application of the product in the field he knows; he could see that the copy has the right "ring" to convey the message to the market which only he knows. The advertising man could plan the dramatization of the message, could write the copy, and build the advertisement. The engineer could check the technical points presented on the product itself.

### THE ADVERTISEMENT MUST BE CORRECT TECHNICALLY

One of the factors peculiar to advertising the technical product is the critical attitude of the audience. In advertising general commodities, the average buying intelligence of the class of prospects for the product or goods advertised, is not exceptionally keen or alert. However, in the case of technical advertising, the message is delivered

to a group of men who are supercritical. An advertisement may be carried out in a masterful style, the message may be properly dramatized by the good use of illustrations, proper display, and excellent copy. It may incorporate all of the best principles of advertising. However, if the advertisement is not absolutely correct technically, the whole advertisement will be impeached in the mind of the engineer or buyer who reads it. He will discount the message utterly.

The safest thing to do before publishing the advertisement is to put it into the hands of the engineers with the organization, so that it can be checked before being published. There is really a necessity for this check from two points of view. It should be checked by the engineers who are experts on the product of the manufacturer or advertiser and who are with his organization, perhaps in the engineering department; and it should be checked also by the sales engineer with the organization, who is specializing on the particular application that the advertisement covers. Usually, this sales engineer specializing in the application of the manufacturer's product to some particular field is thoroughly familiar with the apparatus of his customers and prospects and can check the application of his own company's product to the products of his prospects and customers.

In using a photograph of an installation to attract attention to an advertisement, it is important to be sure that the photograph used appeals and applies directly to the field to which the advertisement is addressed. For instance, if you are advertising electric motors for coal mines, it is a serious mistake to show the surface arrangement of a metal mine for the illustration of your advertisement. To the average advertising agency man, or even perhaps the man connected with the advertising department of the manufacturer of the technical product there is no difference in appearance between a coal mine tippie and the concentrating mill of a metal mine. However, to the coal mining man and the metal mining man, there is a great difference.

All babies look alike to a bachelor, but you can't fool the mother of the child.

### THE PSYCHOLOGY OF THE MARKET GROUP

In technical advertising, a great deal of thought has been given to the psychology of the subject but there is little evidence of any crystallized thought in this direction. Advertising men might well take up seriously the psychological factors of the problem of advertising the technical product. The authors believe that the assumption is made too readily that the engineer is a sort of a fish-like creature who is absolutely lacking in the human qualities that make up the average individual. All advertising attacks him on the assumption that he is utterly a cold, logical sort of fellow who is not responsive to any other sort of approach than  $2+2=4$ .

It is true that this equation must be satisfied when it is presented to him, but there are certain attractive possibilities to humanizing the equation for him, of removing the abstractness, of making it a bit warm.

The injunction is passed that advertising of technical products should stick to "brass tacks." Very true; but a talk with the salesman representing the manufacturer of brass tacks will reveal that there can be something else to a brass tack besides the ability to hold something down, or up.

There are certain bits of finish that can be put on advertising in its various forms that will influence the engineer more or less through his senses. After all, the engineer is just a human being like the rest of us and can be influenced by an appeal to his senses or by suggestion, that is, by the more indirect forms of appeal. The treatment of advertising matter that is aimed to appeal indirectly should be handled in such a way, of course, as not to impeach or discount the appeal to the engineer's hunger for direct proof.

### THE TERRITORY WITHOUT SALESMEN

One of the common sins of advertisers is to advertise in a territory and make no arrangements for following up the



advertising. Some products really need the follow-up of a salesman's call to sell the product. The advertising can only introduce or do missionary work for the product. Unless the territory is covered by a salesman or a dealer, no results really can be achieved from the advertising going into that territory. This applies particularly to engineering products whose sale depends upon the recommendation of a sales engineer for installation, factors governing the operation of the product, etc. It is obviously a mistake, therefore, to spend money on advertising such a product in a territory where there is no follow-up being effected by salesman. Yet this is done very often. The advertiser should inquire sufficiently into the territory in which his advertising messages are to be circulated.

#### ADVERTISING THE PRODUCT MARKETED THROUGH DEALERS

In advertising to dealers the product becomes a secondary factor. The primary factor to advertise to the dealers as a market for the product is the business proposition crystallized around the product as a nucleus.

If the advertising campaign planned to promote the sale of a technical product through dealers is complete, it will include advertising to the prospective consumers of the product, too.

However, the small manufacturer who distributes through dealers because he has not enough capital to finance a sales and distributing system of his own, may not be able to finance a general consumer campaign on his product. In this case, his advertising to the consumer may take the form of circulars or folders, which he puts into the hands of the dealers to be used as enclosures.

In any case the manufacturer should not use blanket appeals to both the consumer and dealer markets. To the consumer, he should advertise his product or its service; to the dealer, he should advertise his business proposition, of which his product is a part.

## FITTING ADVERTISING INTO A MARKETING PLAN

It is our purpose to consider in the following paragraphs the marketing of a technical article that is to be sold to manufacturers and in turn sold by them as a part of their product, which has a broad consumer distribution. We shall consider what mediums might best be used to make a complete, well rounded, and successful selling campaign. In this particular case all our selling efforts and all our advertising must be so planned, designed, and placed that their effects will in the end be felt by the manufacturer and make it easier for him in turn to market his product, of which the article we have to sell is an integral part or accessory. Such an article may be a rear axle, transmission, or motor for a motor truck, or an anti-friction bearing for tractors, or an electric motor attached to and sold as part of a household appliance. It may be built into the machine or merely installed as an accessory that will make the machine more complete and satisfactory in the hands of the purchaser.

*A Marketing Plan First.*—Fitting advertising into and making it a part of the promotion efforts of such a sales campaign calls for a very thorough analysis and the synthesis of a definite marketing plan. It is unquestionably true that any marketing plan to be complete and successful must include advertising as one of the important factors. If the advertising is wisely woven into the sales promotion plan, it will save much time and money in getting large and wide-spread distribution. A very common error and one that is responsible for a great many business failures is that of starting without first deciding on the sales policies and on a definite marketing plan; by this we mean a fundamental basic plan which underlies all sales and advertising efforts. Furthermore, any marketing plan must take into consideration every element in completing the distribution, because even some seemingly unimportant, small factor may prove to be the rocky reef upon which the whole merchandising ship will be wrecked. After this basic

marketing plan has been thoroughly formulated and the sales policies decided upon, the next step is to lay the plan for the sales and advertising campaign.

The first step to be taken in building the marketing plan is to analyze very thoroughly the product that is to be marketed; and, the second, to decide who must be reached and influenced, in order to sell the product. The next step is to determine the method by which these prospects can best be reached. It is necessary to keep in mind, all the time, that whatever advertising is adopted must fit into and augment all other sales plans.

*An Example.*—We shall take, for example, the case of the product that is sold to a manufacturer to be used as a part of his product, which is sold to dealers, who re-sell it to the users. The marketing analysis in the present example will show that the large quantity market lies with the manufacturer and that all efforts must be directed toward influencing him both directly and indirectly. This analysis will also show that there are a number of factors outside of the manufacturer, each of which has an important direct or indirect influence on the sale. Some of these factors affecting the sale outside of the manufacturer are his engineer, production department, sales force, dealer, distributor, agent, and last but not least, the consumer. Advertising and other sales efforts must be directed simultaneously to the influencing of all these factors. The purchaser of a household appliance is very unlikely to take off the motor furnished with such an appliance and install another one regardless of how well he may be sold on the other motor. The purchaser of a motor truck is very unlikely to change the transmission, axle, or motor, unless such parts wear unduly or give trouble. Replacements will be found an insignificant factor, and where such might be had, they will logically follow if the initial sales effort is effective. Therefore, in order to sell a product for any applications of the nature mentioned, it is important to sell the ultimate user by such methods as will not antagonize the manufacturer who actually buys the

product. In between the manufacturer and the ultimate user there are many very vital factors that have important influences and that must not be overlooked in order to make the campaign complete.

*The Purchaser.*—Advertising to the purchaser reduces sales resistance for the manufacturer. It makes it easier for the manufacturer to secure distributors or sales agents and makes it easier for their salesmen to close the deal. Advertising of any part that goes into the product of any manufacturer works hand in hand with his own advertising and it even gives him added prestige if such a parts maker is well and favorably known to the consumer. It has often been proved that the reputation of the manufacturer of some leading part or equipment has been the vital factor in the successful marketing of many devices on which or in which such accessory or part was important. For instance, when the automobile salesman tells you that the car has a Continental motor, a Timken axle, Remy electrical equipment, Silvertown cord tires, are you not influenced by your knowledge of the reputation and standing of these parts or accessories manufacturers, and is not your opinion of the car as a whole in accord with your opinion of these parts or accessories with which you have been made familiar through advertising? It is obvious, therefore, that the use by the manufacturer of well known and well advertised parts reduces sales resistance. Such advertising done by parts or accessories manufacturers is of great assistance to salesmen, as they can cash in on the influence that this advertising has exerted on the purchaser.

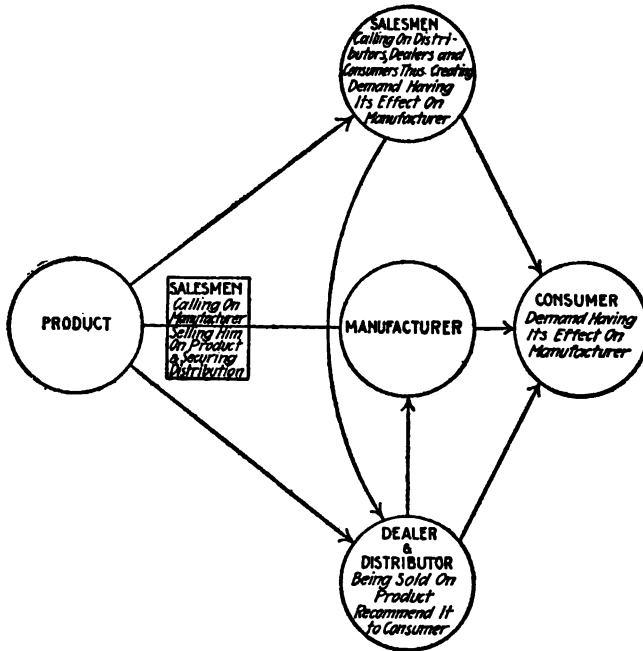
*The Engineer.*—In the case of the technical product, it is quite necessary that the engineer also be sold on the proposition, as his approval must be obtained before the product can become a part of the product for which he is responsible. This one field alone may require a complete advertising campaign. The advertising that is directed at the consumer will not entirely convince the engineer, although he may read it and feel its influence to some degree. The engineer must be handled after the fashion of

his kind, and he must be given a technical reason and explanation that will prompt him to make a complete investigation and test on his own account. It may be advisable to have a sales engineer call on the engineers of the leading companies, whom it is desired to sell, in order to explain thoroughly to them the technical points and to satisfy them as to the merits of the article in question. Here samples, tests, and personal sales efforts by sales engineers must go hand in hand with advertising.

To assist a sales engineer in establishing his product firmly in the mind of the engineer who acts as advisor to the manufacturer and to secure his full co-operation, it is well to consider advertising in technical publications such as are read by engineers. In the case of a new product, it is desirable and usually possible to secure editorial endorsement of descriptive and illustrative articles that possess engineering news value. This is one of the first points to be taken into consideration in formulating the publicity plans for any new equipment of a technical nature. Another way of getting the product before the engineer is to prepare a paper dealing with the results secured from the use of the product, to be read at engineers' meetings. Such a paper, of course, must be prepared and delivered in an ethical way. This work can be carried out through the engineer of the parts manufacturer. It always should be borne in mind, in marketing a new product of this nature, that every person to be influenced must be met on his own ground and that the product must be presented from his angle, whether he be manufacturer, engineer, production manager, purchasing agent or consumer.

*The Manufacturer and Dealer.*—Having taken the engineer into consideration, it now becomes necessary to consider the manufacturer. He must be sold to the extent that he will either make the product to be marketed standard equipment on his product, or offer it as optional equipment to be used whenever specified by the purchaser. In this connection, advertising of a prestige-building nature must be considered. In considering what form of advertising

is to be used, and the nature of the advertising, the effect of the advertising upon the manufacturer whom it is desired to reach is important. As a matter of fact, this is necessary in all of the sales efforts and advertising, as the manufacturer is the final court of appeal. And unless he is sold, all the other efforts will be fruitless. It never should be taken for granted that the manufacturer or dealer



The influences on the sale of a product that must be stimulated by the advertising, in the case of a product sold by the manufacturer to another manufacturer, who builds it into his product, which in turn is sold to the consumers through dealers.

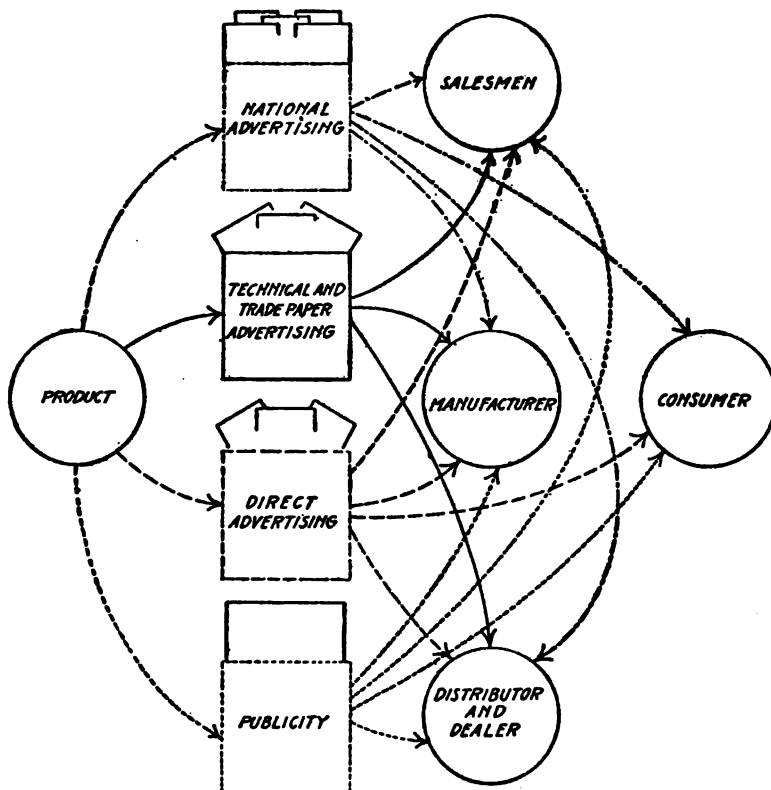
can be forced by purchaser influence. The purchaser will become unsold in too great a percentage of cases unless the manufacturer or dealer finds it to his advantage to help make the sale. Therefore, the product must render an actual service to both the manufacturer and consumer. On this assumption should be based the appeal to the manufacturer for his assistance in the campaign. The adver-

tising must sell the manufacturer not only on the quality of the article, but also on the reliability and dependability of the company back of the article.

*The Consumer.*—The selling of the engineer and the manufacturer on the proposition has established a foundation for distribution which with the aid of other sales efforts together with advertising, can constantly be built upon. The stage now has been reached where it becomes necessary to create a consumer acceptance. The consumer must be sold on the product in question in order that he will call for it when ordering any of the equipment in connection with which it can be used, or that he may carry conviction in his mind as to its merits, a conviction that will be of great value to the manufacturer when his salesman uses the product as a sales argument. In fact, an effort should be made to induce the salesman to use this sales argument, as it can readily be proved to him that it will reduce his sales resistance and make sales come more easily and in larger volume. In few cases only is it possible for a representative to call on each possible user; therefore, advertising must be relied upon almost entirely to create consumer acceptance. In some cases it may be advisable to test the marketing plan in three or four representative territories by having salesmen call on the large users with a view to having them specify the product when ordering equipment on which it can be used. It may be advisable to supplement the salesmen's efforts by any of the several forms of advertising. Outdoor advertising, direct mail advertising, newspaper advertising, exhibits, and demonstrations all can be used to great advantage in connection with a concentrated campaign of this nature. The keynote of the advertising to be used may be found through missionary efforts by having a salesman call on a sufficient number of prospects to determine the tendency. In many instances this will reveal the points of sales resistance in the minds of the ultimate purchasers.

The salesman, in addition to calling on the large prospective users, might well call on the salesmen or agents

representing the manufacturer, as these salesmen are most likely to know when equipment is to be sold and if the product can be used. There is much co-operative sales effort that can be included in such missionary work and this should be made the keynote of this work.



The advertising mediums and the groups that they reach, in advertising the product referred to in the preceding figure.

If the salesman, distributor, or dealer, as the case may be, can be sold sufficiently well so that he will bring the product to the attention of his customer, this will overcome a great deal of sales resistance and be of great assistance in closing sales.

Having tested out all sales policies and found them to be entirely satisfactory and having made the necessary dis-



tributing arrangements to take care of the consumer demand, the marketer can now give attention to creating the general consumer acceptance that will open up the largest possible field that can be handled by present production facilities. All of the fundamental work must be well formulated and carried out before the most effective consumer advertising can be undertaken. Unless the obstacles are removed from the consumer's path in securing what he is asking for in making the purchase, the advertising will not be fully effective. In too many cases the consumer advertising is expected to do the complete work and in such cases failures are sure to be recorded. This is the reason for logical marketing plans in which every element plays a part. It is a fallacy to assume that it is only necessary to create consumer acceptance and that dealer and manufacturer will be forced to fall into line, because such an assumption will cause to remain the resistance that will make the consumer advertising effective only in a small way. If the consumer finds that at every turn in his endeavor to secure the product advertised, he is blocked, and effort is made to unsell him on his conviction, he soon will become convinced that his judgment is wrong after all.

*National Advertising.*—Naturally in considering creating a broad consumer demand or acceptance, we turn to national advertising, because in a great many cases national publications solve the problem. Of course, they do not always present the most economical method of creating this consumer demand; in the case of products to be sent to a limited group or territory some other method may be just as effective and very much cheaper. However, the national publications are the correct solution of the present problem, in which it is assumed that the product has a prospectively broad distribution, and that there is plenty of capital available for a broad, complete campaign.

## CHAPTER VII

### THE ADVERTISING APPROPRIATION

Methods of making up the appropriation—Factors to be considered—  
Component markets should be considered—Good records valuable—  
Controlling advertising expenditures.

“How much shall I spend on advertising?” must be answered with as many qualifications as the question, “How much shall I spend in building my plant?”

In a general way the amount of money to spend on advertising depends on:

1. The money available for advertising.
2. The objects to be accomplished.

Perhaps the most common basis for the advertising appropriation is the advertiser's pocket-book. He can afford *so much*. This amount automatically becomes the advertising appropriation. The authors have no quarrel to pick with this chap; he is “one of us”. Therefore they would like to urge this point to him with all the emphasis that can be put into written language: Be sure that you spend your advertising appropriation in such a way that it will develop a maximum power in *producing sales for you*. Don't follow blindly the methods of big advertisers with unlimited means. Concentrate your attention and the attention of your advertising counselor on getting as close as possible to direct results in the form of sales.

### METHODS OF MAKING UP THE APPROPRIATION

The following methods in making advertising appropriations are in common practice:

1. No appropriation is made.
2. The advertiser appropriates what he feels he can afford.
3. The appropriation is based on the amount spent for advertising the preceding year.

## 68 GENERAL PROBLEM AND ITS ECONOMIC ELEMENTS

4. A certain part of the profit made during the preceding year is set aside as an advertising appropriation.

5. The appropriation is based on the prospective sales volume.

6. An appropriation is set aside to cover all of the advertising. Then the appropriation is classified into various amounts to be spent on general publicity, campaigns on the various products, campaigns in the various industries, etc.

7. The advertiser is carrying on more or less standardized practices in connection with the advertising of his regular products. He brings out a new product or enters a new field. An appropriation is set aside to cover an advertising campaign on the new product or in a new field.

8. The advertiser can afford to spend a certain proportion of the price of his particular product in producing inquiries through his advertising in the magazines and in following them up by mail. This gives him a unit cost per expected sale, on which to base his appropriation from time to time. Of course he must use the mediums that give him results in accordance with his unit cost.

### FACTORS TO BE CONSIDERED

The advertising appropriation is based on the following factors:

#### I. *In the case of limited capital:*

1. Capital available for selling and advertising.
2. Capital available for advertising.
3. Low cost of some direct forms of advertising make them immediately available.

#### II. *In the case of unlimited capital:*

1. The product.
2. The sales volume to be achieved.
3. The percentage of the sales volume that can safely be allowed for sales and advertising expenses.
4. The relation between sales effort and advertising effort needed to achieve the volume.
5. Plant output.
6. The capacity for expansion.
7. Total consumption of the product in the case of a standardized product, like transmission belting.
8. Total prospective consumption of the product, in the case of a specialty, like roller bearings for looms.
9. Psychological factors in the market.
10. The time the advertiser wishes to take to achieve his objective.

11. The geographical distribution of the prospects for the product.
12. The distribution by industries of the prospects for the product.
13. Competitors' sales volumes.
14. Competitors' advertising.

The appropriation is based by many on the expected volume of sales for the period covered. The appropriations set aside by manufacturers on this basis vary from two per cent. to five per cent. of their anticipated total sales volume. On special campaigns, as in the case of a new product added to his line, which he wishes to establish on the market, the manufacturer will invest his profit from that product for two or three years in advertising it.

Where the advertising is simply to be an extension of already existing practices, the appropriation can be based on what has been done in the past. But in the case of a new product, of some marked departure from the products known by experience, or of an intention to dominate a market in which the advertiser has been weak, it is necessary to make first a study of the product in relation to the new market, a study of the market, and a study of advertising the product to this market. Intense study and thorough investigation of these factors in the field will provide the advertiser with a fund of statistics setting forth the limitations of the market, and with a sense of all the conditions of the problem. The campaign and the appropriation can then be laid down on a foundation of knowledge.

It is a comparatively simple matter to keep statistics in the advertising department on what one's successful competitors are spending on magazine advertising. The advertising rates in the various magazines are of course known and it remains only to keep track of the space being used by the competitors.

The advertising appropriation should cover the entire anticipated cost of advertising in all of the various forms that are to be used. Proper allowance should be made in

arriving at the amount of the appropriation, for the correct balance that must be established between the various advertising mediums. It is not an uncommon occurrence for advertisers to appropriate a certain amount of money for advertising in the magazines and to neglect to make the proper allowance for the costs of getting out sales-clinching literature in the form of letters, booklets, catalogues, prospectuses, etc.

The appropriation must be made up, of course, with one eye on the money and the other on the results that are desired to be accomplished during the period covered by the appropriation. Only such money should be set aside for advertising as is necessary to carry out effectively the sales plans. The sales campaigns should be outlined first, the advertising campaigns developed from these and then the money appropriated to cover the cost of these campaigns.

Appropriating a fixed sum of money that is based on how much was spent on advertising the year before, on the total sales volume of the company, on a plan for "dominating" the market, or on any other such weak foundation is likely to cause a false attitude toward the advertising appropriation. "There it is; our job is to spend it," is certainly a less desirable idea to have in the sub-conscious minds of the men in the advertising department than, "We have certain results to accomplish; here are the various objects; here are the various appropriations covering the respective campaigns to attain these objects."

The important point in connection with the appropriation is this: Make a definite appropriation, whether the amount is small or large. If you can't judge what you will need to spend during the coming year, or what you can afford to spend, then set some shorter period. Surely you can plan ahead three months. Once the amount covering a definite period is determined you will have a basis on which to plan your advertising, a basis on which to build a campaign.

### COMPONENT MARKETS SHOULD BE CONSIDERED

A manufacturer who distributes his product to several large industries might well make an allowance in making his appropriation for each one of these several industries, because of the fact that conditions during the period covered by his appropriation may not be equally prosperous in all of these industries. A manufacturer of power transmission equipment, for instance, should keep his eye on the various industries to which he is selling, and if a particular industry shows great activity he should increase his advertising for the time to that industry. There is nothing like going after the business hard at the time it potentially exists.

‡ Certainly, there is less resistance to selling to an industry where business is brisk, than to an industry where conditions are a bit dull. By keeping statistics on the industries to which the products are distributed, a line can be kept on the activity in these industries and the sales and advertising effort increased to correspond with the increasing possibilities in the industry at the time.

### GOOD RECORDS VALUABLE

There are no percentages that can be set down to cover advertising appropriations in general. Each advertising problem has its own peculiar factors. In the beginning of a company's history or in the beginning of a product's history a certain amount of groping must be done to find exactly the right path to follow. But the lack of certainty need not continue long if a careful watch is kept over the causes and effects put into operation by the spending of money on advertising. The intelligent, careful keeping of sales and advertising statistics will provide means for accelerating results and for making economical appropriations.

To a considerable extent the appropriation must be based, of course, on somebody's good judgment born of intense experience in the advertising problem at hand. Conditions are constantly changing, and at the time of the appro-

priation the manufacturer probably faces an entirely new set of conditions. Nevertheless, good judgment can be assisted by good records

Advertising is not an investment until the money spent on it has come back in the form of sales of compensating proportions. At the time the money is spent, it must be charged as an expense. The care with which the advertising campaigns are laid out and executed determines how much of the advertising appropriation can be charged later as an investment.

In his early campaigns the manufacturer may be rather at sea in making his appropriation, because there is nothing available to serve him as a basis for how much he should spend and how he should spend it. However, the keeping of accurate records will provide him soon with valuable indices of what factors have been the most important in accomplishing results. The careful interpretation of the records and the factors they emphasize will result in intelligently planned campaigns and the necessary appropriations for them.

Much-loose advertising practice can be charged to the rather commonly accepted saying that it is impossible to check advertising returns. We do not say "commonly accepted *belief*," because we know that good advertising men believe that advertising returns can be checked. The *saying* has been so common that it has made a good "alibi" for everybody.

Some have developed statistics and systems, peculiar to their own advertising problems, and these systems provide indices to the results being accomplished from time to time by the various campaigns that are run. The advertising manager who records intelligently his advertising expenditures, and the sales results that are being accomplished, will have a basis for study that will reveal a surprising lot of definite relations here and there between the advertising and the sales. And whatever of these relations can be discovered are extremely useful in planning subsequent advertising appropriations. An ounce of "cause and

effect" deduced from carefully kept statistics is worth a pound of guess-work when it comes to planning the various advertising campaigns to be run, how much money to spend on them, and how, when, and where to spend it.

The accounting department of the company usually asks the advertising manager to keep track of his expenses according to some classification placed in his hands. It is one thing to keep such a record of expenses and quite another to keep a record of expenses that will show the relation of every nickel spent to the sales results being accomplished in some particular direction.

All money spent on advertising, directly or indirectly, should be chargeable to some definite sales object to be achieved. These objects should be set forth from a sales point of view and an accounting system established that provides the advertising manager with an index of the money being spent for these objects and the rates at which they are being accomplished.

### CONTROLLING ADVERTISING EXPENDITURES

To spend money intelligently for advertising and thus bring the greatest return it is absolutely necessary to know the rate of expenditure at each step. Charting of expenditures on any campaign should begin just as soon as the first dollar is spent. For every campaign a record of the following items should be charted:

- A. Total sales of advertised products covering and over-lapping the period of the campaign.
- B. Total cost of advertising campaign. (The cost of the advertising at any point of the curve is the cost of the various messages actually reaching the market at this point.)
  1. Indirect advertising expense.
  2. Direct advertising expense.
    - (a) Preparation: art, engraving, printing, etc.
    - (b) Space.

The total advertising expense (*B*) can be considered as being made up of indirect advertising expense or overhead (1) and direct advertising expense (2).

The indirect advertising expense (1) is made up of such



overhead accounts as salaries and travelling expenses of members of the advertising department, the advertising department's share of rent, heat and light, and the cost of the advertising department equipment—true overhead expenses.

The direct advertising expense (2) consists of the costs of art work, engraving, printing, space and other costs directly chargeable to the final advertisement that reaches the prospect.

It is useful further to divide the direct advertising expense into cost of preparation: art, engraving, printing, (a); and the cost of space, (b).

By charting the sales (A) and the advertising expenses (B) graphically, the relation of the advertising expense to the sales figures of the corresponding period will show the effects of the campaign.

It is necessary to watch the ratio between the indirect advertising expense (1) and the direct advertising expense (2), because as in any other branch of business the overhead must be watched and kept at a minimum. A good advertising manager can keep (1) from assuming too large a proportion of the whole and still make (2) most effective.

It is helpful to know the relation of the cost of preparation such as engraving and art work, (a) to the cost of actual space used (b). Generally speaking, the lower the circulation the higher this ratio will be, for the cost of preparing an advertisement for a trade paper of limited and specific circulation is seldom much less in actual dollars than the similar cost of an advertisement appearing in the high-priced space of a medium of national circulation.

The actual charting of advertising expenses and corresponding sales on regular co-ordinate paper or on logarithmic paper will show very clearly just what effect the advertising has upon the sales at any point in the campaign, all other things being equal. A high peak in advertising expenses will not be justified unless the sales curve also takes a sharp upward turn soon after. Allowance must be made, of course, for the natural lag in sales.

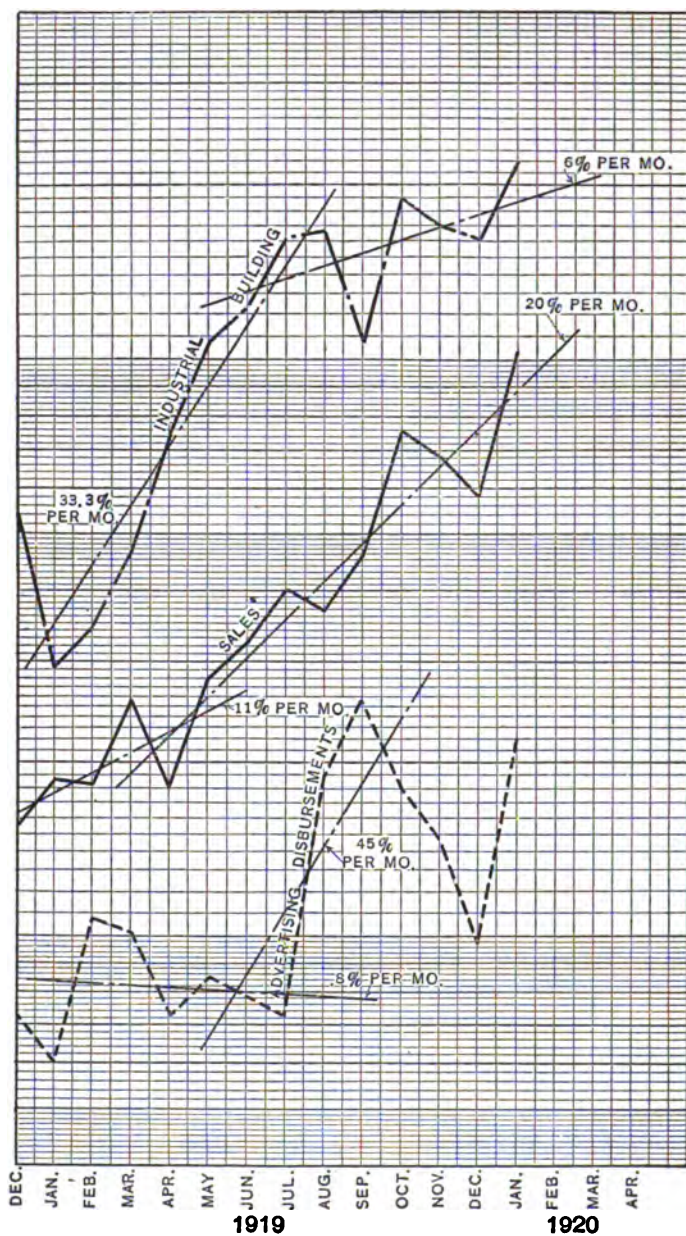
In many businesses it has been found wise to spend for advertising a definite proportion of the sales receipts. A set of curves will aid in maintaining this ratio. If the sales curve goes up and remains up to such an extent that the advertising expenses are a very small percentage, then some worth while method of spending more money for advertising must be sought in order to keep the business in a healthy, stable, *growing* condition.

Very often this increased advertising expenditure can take the form of the use of larger space or more frequent insertions in the same medium. This is, when advisable, an excellent method of increasing the productive advertising expense without adding to the non-productive or overhead.

An interesting instance of how these graphs can be very valuable occurred in the sales department of a company selling a technical product, the sale of which is affected by the amount of new building operations. The sales manager had plotted his sales against the figures for industrial building throughout the country and was delighted to find that his sales curve followed almost exactly the same form as the master curve. If there was a big boom in building which would show up on the building curves as a peak, there would be a parallel peak in his sales curve a month or two later.

For some months he felt that his curve showed that he was getting his share of the possible business. As the amount of new building construction increased his sales increased, and vice versa. One day, however, in studying the curves, he woke up to the fact that the curves showed that he had always been getting a definite proportion of the new business, whereas he should have been getting business at an increasing rate.

His sales had been increasing at a steady rate of about 11 per cent. a month and his advertising disbursements were fairly constant. In July of that year he began to increase his advertising disbursements at a rate of about 45 per cent. a month, almost entirely by using more space



Effects of advertising on sales in relation to industrial building.

and more insertions in the same mediums. Immediately, his sales began to climb at a rate of 20 per cent. a month, although the Industrial Building, which had been increasing at a rate of  $33\frac{1}{3}$  per cent. a month, actually slowed down to a rate of 6 per cent. a month increase. He was beginning to get, by means of increased advertising and selling efforts, an increasing proportion of the possible business, instead of a fixed proportion.

The curves showing the relation between sales, industrial building, and advertising disbursements are shown on the accompanying figure. They are plotted on the *ratio* or *semi-logarithmic* paper in order to be truly comparable, since the three factors represent money units of different degrees; that is, the advertising disbursements amount to thousands of dollars, the sales amount to tens of thousands, and the building amounts to millions. In the case of the factors' representing money units of widely different degrees, plotting the curves on *ratio* or *semi-logarithmic* paper makes possible a true interpretation of what is taking place, because equal slants on any one curve or on any two curves represent equal rates of increase or decrease.

The study of curves of this nature often shows that a doubling of advertising expenditures will produce a tripling or quadrupling of sales. This is due to the increase in productive advertising without a similar increase of non-productive and to the law of mass action which comes into play when a larger amount of advertising appears. It produces increased results because its increased momentum overcomes the inertia of the buyers.

Surely every advertising manager should keep an accurate account of his expenditures for every campaign and plot these for his own information, as a quick, convenient way of showing results to the sales manager, and as a help in obtaining appropriations from boards of directors.

To know the relation between the *trend of advertising* and the *trend of sales* brings advertising not to the state of an exact science perhaps, but puts it on a logically sound business basis.

## CHAPTER VIII

### THE CAMPAIGN

Planning the campaign—Continuity and distinction of character—  
The choice of mediums—Planning Westinghouse advertising—  
National Tube Company campaign—Campaign in the technical  
magazines—The salesman's campaign—Co-operative advertising  
campaigns—The dealer's campaign—Localized campaigns.

#### PLANNING THE CAMPAIGN

An advertising *campaign* is a complete plan of action; it employs the medium or all of the mediums that can be used economically in accomplishing the objectives.

It is just as necessary for the advertiser of limited sales and capital to plan his advertising as campaigns, as for the big advertiser. Perhaps it is more necessary. The mistakes the big advertiser makes can be charged to profit and loss. Low-efficiency sales work due to an uneconomical use of advertising may put the small advertiser out of business.

The simple, concentrated forms of direct mail advertising or the use of limited space in just the right technical magazine or magazines offer to the advertiser of limited resources inexpensive means of producing direct sales or of producing inquiries that can be closed quickly into sales by direct representation. These limited expenditures should not be made, however, before a thorough study and analysis have been made of the problem in hand. The campaign should be based on facts.

The laying out of an advertising campaign calls for the application of all the known advertising principles to the problem of gaining the objectives in the shortest possible time and with the least expense.

It involves a careful study and a detailed analysis of all the data at hand and all the facts that can be established in the field. Advertising principles are general, but the correct application of them demands a special consideration for every product and its own market. The campaign must be planned with a full recognition of all of the factors that are peculiar to the special problem in hand.

*The Points to be Considered.*—The following are the points to be considered in planning the advertising campaign:

- I. *Capital available.*
  1. Capital available for marketing.
  2. Capital available for advertising.
- II. *Production facilities.*
  1. Capacity of the plant.
  2. Facilities available for expanding production.
- III. *The distribution.*
  1. The product and its component markets.
  2. Channels of distribution.
  3. Distribution territorially.
- IV. *The objectives.*
  1. The general purpose of the campaign.
  2. Direct sales objectives.
  3. Other objectives.
- V. *Special market conditions.*
  1. The adaptation of the general campaign to various local or specific conditions.
  2. Special campaigns on particular applications of product.
  3. Special territories to be concentrated on.
- VI. *Time elements.*
  1. The period of time during which the campaign shall be operative.
  2. The delivery of advertising messages quantitatively in proportion to the volume available in the market at various times during the period covered by the campaign.
- VII. *Buying influences.*
  1. The buying influences to be reached.
  2. Relative importance of various buying influences.
- VIII. *Choice and co-ordination of mediums.*
  1. Choice of mediums for delivering the messages.
  2. Co-ordination of all of the mediums with one another.

3. Co-ordination of all of the advertising forces with all the sales forces.

**IX. *The dealer.***

1. The dealer.
2. Dealer co-operation.

**X. *Competition.***

1. Competition.
2. Competitors' advertising and campaigns.

**XI. *General specifications for the advertising.***

1. Common characteristics of form and appearance in all of the advertising.
2. Continuity in the substance of the advertising.
3. Suiting the characteristics of the messages to the groups of prospects to be reached.
4. Identification of the product.

**XII. *Organization considerations.***

1. The effect of the campaign on the manufacturer's organization.
2. The effect on the manufacturer's sales organization.
3. The advertising organization available for executing the campaign.

**XIII. *Costs and records.***

1. The cost of the campaign.
2. Means of recording the results of the campaign.
3. Means of recording the results accomplished by each medium.
4. The possibilities of testing the campaign in a small way before extending it in a broad, expensive way.

***Getting the Sales Facts.***—The elements of the campaign should be based on data secured in the field, conferences among members of the sales and advertising organizations, and with any advertising experts who can be consulted on the subject such as agencies, technical agencies, publishers' service departments. When a company starts out to sell a product by means of salesmen, there is a chance to correct the sales policy from time to time, in fact almost from day to day, because the salesmen in the field have a chance to gauge the resistance, to make observations and criticisms of the sales policy, and to report these back to headquarters. A watchful eye at headquarters accumulates a mass of facts and data that helps quickly to shift the

selling policy from time to time to meet new conditions in the field. On the other hand, there is no way of doing this from day to day on the advertising. Once a campaign is launched it must be followed through. It costs a lot of money not to be right in the first place.

The advertising manager should set down in some form what he wishes to accomplish with the advertising campaign, and then arrange systematically to fit into the general scheme the various instruments available for carrying out the campaign; that is, for making the idea behind the campaign effective out in the field. After the appropriation for the campaign has been made, the actual work of executing it begins with analysing for the most economical medium or mediums to convey the messages.

Every advertising campaign should be planned in complete co-operation with the sales department. Not even a single advertisement should be written without an insurance provided for himself by the copy writer that the sales point of view is thoroughly understood and can be completely harmonized with in building the advertisement.

The sales department and the advertising department are working to accomplish exactly the same object—to build bigger and better business. To say that the campaign on this objective should be planned to insure complete co-ordination of their operations and uninterrupted *liaison* between their forces might seem like repeating a truism. But the risk is taken, because the lack of this co-ordination in effort is very evident in much of the advertising that appears.

The mass campaigns that are run should be planned with plenty of sales facts and sales points of view at hand. Further, a study by the advertising department of the operations and problems of the sales engineers in their various fields or territories will bring to the surface a great many possibilities for special campaigns or for special methods of advertising that can be executed to supplement the mass campaigns. These special campaigns can be characterized by an extreme definiteness of appeal running



through the messages—an appeal that will concentrate on the turning of prospects into customers.

### CONTINUITY AND DISTINCTION OF CHARACTER

Advertising with a definite character or individuality causes the reader of the advertising to associate this individuality with the manufacturer and his product. This paves the way for intensifying this association in proportion to the number of reactions created in the reader's mind by the advertising—which number, of course, is a function of the number of times he sees it, and its power.

The following are some of the elements of the advertising form that can be standardized to establish continuity and to give a “constant personality” to the advertising: company's name, trade-mark, name of the product, type, color and color schemes, the paper (direct advertising), illustrations and their treatment, lay-out, borders, slogan, trade character, style of copy.

In planning his campaign the advertiser should not make the effectiveness of one advertisement depend upon some far-fetched connection in form with some other advertisement. At least, no presumption can safely be made that the reader retains any of the detail of form that the average advertisement presents.

This detail may be the result of the conscious striving of the advertiser for distinction. But a run through the advertising section of a technical magazine will convince any one that so far as character given by form is concerned any two advertisements picked from ninety-eight out of a hundred of them are as alike as two lodge members in their uniforms. These advertisements in the technical magazines have character, plenty of it, but it is given to them by the substance they contain. It is extremely desirable to create distinction in the character of all of the advertising, to establish standards of form, illustrations, types, trade-mark, and this should be done. But a conscious connection in the reader's mind, a continuity of reactions

# TITANIUM TALKS

No. 13

## Why Blisters Occur On Certain Grades of Steel Sheets and Not On Others

"A quantity of sheets was taken from a good grade of open-hearth steel, others from a heat of steel that had been previously worked and rejected for galvanizing material on account of its galvanizing with the dull granular spangles, and still others from a good grade of wrought iron. These sheets were carefully inspected after they were hot rolled and no blisters could be detected on the surface. The sheets were then box annealed under the same annealing cover and taken to the pickling department, where an equal number of sheets from the three samples of material was placed in the same pickling crate and pickled. After the sheets were pickled no blisters were discernible on any of the samples. These three samples were then galvanized through the same pot in the usual procedure. The wrought iron sheets and the previously rejected steel sheets all galvanized with the dull, small granular spangles, while the spangles on the good grade of steel sheets were all bright and large. The coating was removed from samples representative of each lot of sheets, and the surfaces of the wrought iron and poor steel were found to contain a number of small blisters, while the good steel was without blisters."

This is one of the tests reported by C. A. White in his recently issued book, "A Metallurgical Study of the Steel Base as Related to Galvanizing."

**The Titanium Alloy Mfg. Company**  
 Niagara Falls, New York

Pittsburgh Office, Oliver Building  
 New York Office, 163 Broadway



Chicago Office, Peoples Gas Building  
 T. Rowlands & Co., Sheffield, England

Agents for Great Britain and Europe

Well-displayed advertisement, with the kind of "meaty" copy the engineer likes to read. A splendid method has been worked out of achieving continuity in the company's advertising.

in his mind, can be maintained more surely and more powerfully by the story and its dramatization. The very nature of the elements of form suitable for technical advertising places limitations on the possibilities of achieving conscious distinction of character in the advertising by means of form. The possibilities of the story, properly dramatized, are unlimited.

### THE CHOICE OF MEDIUMS

The following are the principal factors to be considered in making the choice of mediums. "Mediums" are any vehicles that can effectively convey advertising messages.

#### *I. The definition of the group of prospects to be reached:*

1. Defined by type. (NOTE: No "class" distinction is necessary in advertising technical products, because the assumption can be made almost universally that the prospect has the money to pay for the product that is economical in operation.)

2. Defined by their point of view in relation to the product to be advertised.

3. Defined by their point of view in relation to the service of the product.

4. Defined by the weights of their respective influences governing the purchase of the product.

5. Defined territorially.

#### *II. The definition of the various mediums in relation to the respective groups of prospects to be reached:*

1. The sales effectiveness of the medium.

2. The directness of the medium in reaching the group.

3. The moral weight of the medium.

4. The cost per unit *prospect* (not reader) reached. (The entire cost of the message divided by the total number of prospects reached.)

### PLANNING WESTINGHOUSE ADVERTISING

J. C. McQuiston, of the Westinghouse Electric and Manufacturing Company says:

"Our advertising in general is based on a plan or schedule covering a yearly period, dating from April 1st, synchronising with the fiscal year of the company.

"To plan successfully in advance, a year's advertising work, it is

necessary for the Manager of the Department of Publicity and his assistants to hold frequent conferences with each of the section heads in the several Sales Departments. This procedure is necessary because the Department of Publicity, in its studies of market conditions, must obtain from the Sales Department a true insight into the nature of the products for sale in order to present properly our claims in meeting and overcoming competition. These conditions are complex and often problematical. To meet them successfully requires not only suitable apparatus, but a foreknowledge of demand, an understanding of the functioning and application of the apparatus, and particularly skill in presenting these facts and in capitalizing our research into marketing conditions, present and future.

*The Budget and the Mediums.*—"Consideration is given to the amount of space required in technical advertising mediums, number of catalogues, etc., required, and other advertising helps for each section. All the information covering the advertising needs of the various sections is brought together in the Department of Publicity, and the general advertising budget prepared showing by departments the total amount of money required for advertising, and in detail the amount to be expended under the following classifications:

Popular advertising—Technical and trade advertising—Literature, publications, distribution—Service helps—Window trimming—Diary—Articles for the press—Exhibitions and conventions.

"Such a budget contemplates not only the specific needs in each department of sales but, also, the broader aspect of the company—that of cultivating and maintaining good will, etc., for which purpose institutional advertising is included in the program. This advertising plan or budget, after receiving the endorsement of each of the Sales Department heads, is submitted to the Domestic Sales Committee, composed of the Vice-President of the company and the sales departmental heads, for approval. It will be seen that by this procedure the more specific and detailed needs of the various branches of sales are ascertained, and later, the institutional features of the plan are joined with such advertising so as to gain for all, the greatest possible benefit.

*The Great Objective.*—"Among conclusions reached by studying the results of the investigation of the Westinghouse business, it has been agreed not only by the advertising department but by the executives of the company that the advertising must have certain great objectives.

"It must have continuity in form and appearance, so that the public will realize that it is the same great Westinghouse institution which is back of the advertising, whether it specifically mentions motors, generators, heating appliances, or any other product. That continuity is obtained by using the same design, always in the same style of lettering and very prominently, and by showing the trademark circle tangent to a larger circle in every advertisement.

"So far as it is consistent with the selling of individual products it emphasizes the fact that the history, experience and wide engineering knowledge of the company are extra assurance of quality and reliability to the buyer, no matter what kind of product is advertised. This represents a fundamental selling and advertising policy established by the experience of the largest and most successful, advertised concerns in the country in recent years. It means just this—that it pays larger dividends to sell one big thing common to a line of products, pointing out its relations to the individual article under discussion, instead of advertising separately a multitude of different brands, trade names, and products—some nationally, some locally, some in small space, some in big, and so on.

"It means that it pays better and costs less to dominate a few of the best national publications with large space and frequent insertions than to use many mediums without dominating any.

"Westinghouse advertising has not only a direct selling motive back of it, but also what may be termed an institutional motive. There are only a few institutions in this country who can claim for their product that it is directly related to the most important phases of human activity and civilized progress.

"Westinghouse is one of the few. Its product has a direct relation to almost every form of industry—mining, agriculture, manufacturing, transportation, and to many aspects of time-saving, labor-saving, profit, power, domestic economy, and so on.

"Therefore while we prepare and publish every year definite advertisements on fan motors, automobile equipment, other small motors, large motors, central station equipment, heating appliances, etc., all of these individual advertisements are part of a general plan to make the name Westinghouse first in the public mind whenever any aspect of electricity is mentioned.

*What Institutional Advertising Does.*—"The strongest form of institutional advertising is that which takes as its subject something of genuine interest to the reader and then leads him directly either to the product or the service that the institution has to sell.

"In the case of automobile equipment advertising, for instance, we are dealing with a man who owns or expects to own a motor car. We are endeavoring to impress upon his mind not simply how Westinghouse equipment is made and why he ought therefore to purchase it, which merely suggests immediate comparison with competition, but to secure his interest by talking first about something which is right now in his mind and winning his confidence, making him understand that this is the great Westinghouse Company, known all over the world, which is back of the product, and thus securing a good will which comes back to us when he buys a car.

"There is another reason why we have given perhaps more promi-

nence to automobile equipment advertising than we would otherwise in proportion to its volume of business. That is that we have a point of contact with an immense part of the public vitally interested in the automobile industry, and through that interest we have another wide channel through which to get across the idea of Westinghouse leadership.

"The preceding are larger objectives than merely making individual sales, though they do not in any way interfere with making individual sales, but stimulate them."

### A NATIONAL TUBE COMPANY CAMPAIGN

L. F. Hamilton, National Tube Company, Pittsburgh, says:

"Planning an advertising campaign is purely a problem in selection—based on our peculiar needs and the limits of our appropriation. Furthermore, some concerns with different problems might not be able to use the idea outlined at all. What is one man's meat is another man's poison. With these preliminary remarks I will outline the campaign in question.

"In endeavoring to advertise *National* pipe we found that there were certain conditions in the consuming field which seemed to demand fundamental education rather than immediate selling arguments.

"Our company has been in business for fifty years and expects to be in business for some few years to come—hence we are interested in making an intelligent consumer. Speaking generally, the writer's observation has been that any manufacturer of a quality product can afford to premise his advertising policy on making an intelligent consumer—and then his sales policy can be made such that he will secure his share of the business.

"When casting about for a method of "putting across" a rather complicated story this thought occurred to us: Why not take a leaf out of the book of the successful editor?

"The magazines of largest circulation invariably carry a certain number of continued stories and usually each number contains a synopsis of the previous chapters—so that anybody can pick up any number of the magazine and get the thread of the story.

"*Continued Story*" *Style of Copy*.—"We did so. We divided our announcement into fifty-two different chapters—each one with a heading of its own—and each one complete in itself, but connected with all the others; and one essential of the campaign was that each announcement at the bottom carried a reference to each previous chapter, with the subject of each chapter.

"For example, among the chapter headings were the following:

## 88 GENERAL PROBLEM AND ITS ECONOMIC ELEMENTS

Early History of Pipe Making; The Ore and the Tube; The Bessemer Converter; Spellerizing; Materials for Pipe; Pipe Threading; Physical Properties; Bursting Pressures; Corrosion of Pipe in Coal Mines; Corrosion of Pipe in Hot Water Systems. In fact, there were several chapters on durability of pipe in specific industries.

"We could go on and on and mention the various chapters, but that would serve no useful purpose, for from the above chapter headings I believe the reader will get the general idea of the series.

"We had double pages in the *Iron Age*, and the *Iron Trade Review*, and began.

"From the above I think it will be clear that the endeavor was not so much a selling campaign as an educational campaign. And, as 'the proof of the pudding is in the eating thereof,' we naturally were interested in finding out whether or not the story was 'getting across.'

*Consumers' Opinion of Copy Invited.*—"Incidental remarks from district offices indicated that there was a considerable amount of reading of the series, but we wanted to get more definite evidence. Hence a letter was drawn up and sent to a selected list of large concerns in the steel industry, pipe consumers, etc.

"I might go on and quote hundreds of answers to this letter but I shall give only the net results.

"Two facts were developed:

"1. A very considerable number of influential men (chief engineers, presidents, and managers) had read these chapters.

"2. A very large number were able to offer distinct and definite comment.

"For fear of being misunderstood, I want to repeat again that this method of advertising is not put forth as an advertising panacea in the technical field—it is not regarded as the only method of advertising, or anything of that sort. We had a more or less complicated story to tell—and told it—and we have definite evidence that a large number of influential people read it and were influenced by it. I do not know what more technical advertising can be expected to do."

### A CAMPAIGN IN THE TECHNICAL MAGAZINES

The following story of a campaign in the technical magazines was written by D. J. Reagan, the copy-writer of the publisher's service department that handled the campaign:

"The enlarged campaign of the Chicago Pneumatic Tool Company began over a year ago (this is written April, 1920). It had as its primary purpose, to establish the fact that all of this company's ten and more technical products, with their distinct trade names, are members of the

*Chicago Pneumatic* family. The idea was to get them thought of as a group—with the scope of each more widely recognized. In other words, the job was to make each unit known as a *Chicago Pneumatic* product with its *broadest usage* defined to every possible use in that unit's field.

"As every unit is technical-made for technical use—the campaign was established through trade and technical papers because their readers are interested in the technical program of these papers—a program for technical progress—and because they represent the predominant proportion of buying power.

"To establish the identity of each of these ten and more products, both as to species and family, the name of each unit—such as *Little Giant Air Drill*—was displayed prominently in a distinctive type, always in conjunction with the tail piece which emphasized *Chicago Pneumatic*. The names of all the members of the *Chicago Pneumatic* family were also displayed in this tail piece. Later, when the family connection was found to be established, the name of the unit advertised was then featured at the bottom of the page.

"The predominant proportions of space for copy, heading, type body, name and addresses, and tail piece, were also established as other features of identity. After this, photographs showing the units working on the job were featured. A special method of retouching these photographs gave them a distinctive character.

"The heading appeared under the cut—in approximately the same position—and was carried in italics, of the same type of uniform size.

"The type body has been run in two columns printed in a special type of unique spacing. The proportions of this body have been varied by the admission of small panels in italics, initial letters, or initial thumb nail cuts. Also, where several products are used on the same job, cuts of these have been displayed with the product featured.

"Usually the basis of space has been one page, but never less than a full page. The cumulative effect of continual schedules has proved their success.

"The papers selected for their economy in reaching the great buying power interested in Chicago Pneumatic products have been used intensively. The schedules include the right frequency with invariably a change of copy, and the copy has aimed to cultivate intensively the specific market of each paper. This has been done by discussing the efficient, timely, and economical uses of Chicago Pneumatic products. New features and methods have been reported and examined and due credit given to the authority of the users.

"In part this campaign has had to be educational—at first to establish the identity of Chicago Pneumatic products—and always to demonstrate the dependability and economy of a given Chicago Pneumatic product under actual working conditions. It has sought to stimulate the



salesman, to suggest to prospective users the fitness of Chicago Pneumatic to fulfill their requirements, and to remind present operators of the engineering service that is ready at all times to meet their problems and emergencies.

"The keynote has been the ideal of *dependability* built into Chicago Pneumatic products and demonstrated in performance and in sales and service. It has remained for this campaign to establish among those interested in Chicago Pneumatic products that they can inevitably "depend upon that name" whether stamped on the largest C-P air compressor or the smallest Midget-Drill."

### THE SALESMAN'S CAMPAIGN

It has been said in a preceding chapter of this book that it has become rather a habit to think of "advertising" as the advertising that is done in the magazines. This habit of thought causes a neglect of the many little things that can be done in the way of the use of the printed word to help the sales engineer increase his sales. The sales documents may be so intimately a part of the engineer's sales cultivation work that some question justly might be raised as to whether these are really *advertising*. However, these sales auxiliaries can be made so very effective that the risk of having a discussion of them here called out of place is worth taking.

These advertising helps for the use of the sales engineer in his territory or in the sale of the product to some particular application really must be conceived by the engineer himself. But the advertising department can help him by building the messages and having them set into print, by supplying him with the necessary illustrations for his prospectuses, by getting out special cards and announcements for him, by co-operating with him and backing him up.

*An Example of a Local Campaign.*—As an example of a sales engineer's methods in fitting advertising into his sales work there is told in the following paragraphs the story of his complete campaign. He was sent into the Pittsburgh territory by a manufacturer of anti-friction

bearings to develop in that territory the sales of the bearings for industrial applications. The territory had never been worked consistently before he took up the work there. He had to plan his campaign from the ground up.

In tackling the work in the Pittsburgh territory it was necessary to consider several factors. First he made an analysis of the territory; the potential business; the suitability of his *specialty* to the prospects in the territory. To make this analysis it was necessary that he call on as many prospects as possible. While making these calls he was gaining an accurate idea of conditions, and at the same time he was working up an accurate mailing list.

After several months of this analysis work it was evident that the greatest amount of business was to be secured from the steel mills. In this industry the one important problem is the transportation of the steel. From the time that the iron leaves the furnace until it is shipped as steel, it is moved around the plant in various ways. Naturally, bearings play an important part in this transportation. On account of the very severe duty obtaining in the average plant, plain bearings were used almost exclusively. Anti-friction bearings never had been given much thought because it never had been proved that they had the one important feature—reliability.

In making his analysis, the engineer had uncovered a few applications of his bearing that apparently were unknown to his company. Having investigated the results secured, he was in a position to judge the future of his bearing business. He also was conversant with all of the conditions to be met. At the start, the entire industry was new to him so far as the various processes were concerned. Before starting his investigation he had spent several days at the library reading about the making of steel and about the particular plants in his territory.

*The Steel Mill Engineer.*—In order to show the reasons for the particular treatment of the prospect, it will be best to cover in a general way the main characteristics of the average steel mill executive or engineer. If he is not a

graduate engineer he is at least the equal so far as engineering ability is concerned. His work is always connected with his own activities; he has had no opportunity to commercialize his ideas to the point where he might employ some poor engineering. This feature accounts for the fact that only sound engineering is applied in his work. He does not take chances with his own tools and equipment.

The work develops a very broad-minded class of men. They meet you half-way every time. They are always glad to discuss improvements and accept all those that fit into their problem. A competitor is generally welcome at all plants. Before a new mill is built, a visit is usually made by the engineers of the new mill to other plants to secure the latest ideas on design. At one time the sales engineer's company was making a test on some ingot cars at a steel plant and in order to bring this test to the attention of all mills it was decided to make it a public demonstration, if permission could be secured. This was gladly granted by the steel plant officials because they regarded the work that the sales engineer was doing as being worthy of steel men generally.

The steel mill engineer deals with facts. He reasons in terms of increased tonnage or cost in dollars and cents per ton of steel. If the product fits into the solution of his problems the sales engineer will be granted an audience.

To meet such men it was necessary that the sales engineer be fully informed about the application of his product to steel mill equipment. It was necessary that he sell himself as an engineer. To do this he met as many of the steel mill engineers as possible and talked engineering design with them. He wanted to build up confidence so that he could work effectively later.

After placing himself in a position to do more direct sales work, it was necessary that he investigate each individual plant so that his recommendations could be in the nature of a personal report to the particular company. These reports were worked up in the form of prospectuses.

*The Advertising and Its Results.*—The sales engineer put his whole heart into the preparation of the prospectus. First, he supplied himself with the complete, detailed, accurate, engineering data bearing on the particular application. The recommendation was carefully written and thoroughly illustrated. He arranged a logical presentation of the case. Then he enlisted the assistance of the advertising department in giving the prospectus an attractive, dignified form and appearance.

A letter always accompanied the prospectus and was so worded as to cause the prospectus to be read.

As suggested, the prospectus usually followed previous calls. The prospectus was sent when it was expected it could accomplish the desired result. Interest should be evident before such a prospectus is sent. Further, it must be followed by calls and subsequent letters.

About the time that the engineer reached the point where he was sending out quite a number of prospectuses, his company started an advertising campaign in the technical magazines. This advertising was designed to fit right into his work. It showed that his company was behind him in the work. The advertising copy was selling copy and was the same story that he had been telling. Thus he was backed up in an engineering sense.

Gradually he started to secure some business. Every time that one plant placed an order it gave him an excellent chance to go the rounds and inform the rest of this move. They were all interested in anything that was new in other plants. Possibly he could get them to make a similar move. In this way, he was able to secure some very large jobs. Finally, the bearing was practically standard equipment.

While working with the prospectus and between calls, he made use of post-cards and special letters. These post-cards were made up to show equipment that was provided with bearings. Since he was on a cordial basis with his prospects he was able to send these cards as "examples of first class equipment". The message was always personal.

The letters that were sent out always included some operating data that were of interest to the prospect. These letters were worded to show that the sales engineer had thought of the prospect in connection with these data. There was always a little selling in this letter but it was not very evident.

Letters and cards were not sent unless the engineer had some information to give the prospect. In a like manner, whenever he called he tried to be of some service. He tried especially to leave with the prospect some information about the application of his product in another plant.

The sales engineer's territory was placed on a self-sustaining basis, so far as individual advertising was concerned. All correspondence was handled by or through him and all mailing lists were carefully followed up by him for changes of positions or titles.

The technical magazines were used to show the steel mill men that the manufacturer stood back of his product and back of his sales engineer. But a complete, continuous advertising campaign was run under the direction of the sales engineer in his territory. The campaign expressed itself in the form of prospectuses, letter-reports, letters of suggestions, blue-prints covering details of applications, photographs, results of tests, and post-cards.

### CO-OPERATIVE ADVERTISING CAMPAIGNS

There are several kinds of co-operative advertising campaigns. Some of them are:

1. Manufacturers in an association co-operate in running general advertising campaigns to educate their buying public along whatever lines may be necessary at the time.
2. Several manufacturers who manufacture products that are standardized in some fields but specialties in others co-operate in carrying on educational advertising campaigns in the fields in which the products are specialties.
3. A manufacturer supplies an important product to other manufacturers who use this product as a part or

accessory in making their own equipment. The manufacturer of the part arranges with the manufacturers of the equipment to execute co-operative advertising campaigns featuring the advantages gained by the equipment because of the use of the part.

4. Manufacturers who make products of the same general characteristics are sometimes divided into two or three camps because of the materials used in making the products. For instance, there are the cast-iron pipe people, and the steel pipe people; there are the leather, the rubber, and the canvas belt people. The manufacturers in one camp get together to advertise the advantages of the product as made with the material they use.

### THE DEALER'S CAMPAIGN

The dealer in machinery, mill supplies, heavy hardware, power transmission equipment should plan his campaigns with the following points in mind:

1. The manufacturers who supply him equipment for re-sale are anxious to co-operate with him in developing maximum sales in his territory.

2. The manufacturers are glad to supply any advertising material that is to be used economically.

3. The dealer should have in his office a correct, up-to-date list of all the prospects in his territory for each product he sells. This list should include the names, initials, and titles of all the buying powers of each prospect.

4. The dealer should secure the assistance of the manufacturer of each line he handles in planning a campaign of direct mail pieces addressed to the group of prospects for this line in the territory.

5. Several such campaigns can be planned about the same time, and the mailings of the pieces can be timed so as to establish correct intervals.

6. Attention to details; good lists; interesting and instructive cards, folders, booklets, broadsides; correct intervals for mailing; all these things are necessary to get the best results from direct mail advertising. The dealer who takes these up seriously and follows them through will reap a handsome reward in the form of increased volume.

7. Direct mail is the most dependable form of advertising for the dealer. However, in some cases, special campaigns may require local

## 96 GENERAL PROBLEM AND ITS ECONOMIC ELEMENTS

newspaper advertising, the use of bill-boards favorably located, or other means of obtaining publicity.

### LOCALIZED CAMPAIGNS

In some cases it may be economical for a manufacturer to run intensive, localized campaigns. For instance, the manufacturer who makes a product that is sold largely to a market made up of anthracite mine operators has a localized market, the anthracite region of Pennsylvania. His advertising problem can be solved for that region by the application of the advertising methods most suitable to a localized territory. A study of the prospects in the region probably would develop, as the best means of advertising, the use of high-grade direct mail pieces, the use of newspapers and bill-boards in a limited way, and the use of the technical magazine read most generally by the executives of the anthracite mines.

**PART II**  
**THE INSTRUMENTS AVAILABLE**  
**FOR**  
**ADVERTISING THE TECHNICAL PRODUCT**





## CHAPTER IX

### THE TECHNICAL AND TRADE MAGAZINES

The schedule—The amount of space—Changing the copy—Judging the magazine from the editorial pages—Westinghouse advertising in technical and trade magazines—Engineering societies' magazines—Advantages of technical magazines as advertising mediums—Negatives—Comparison of technical and popular magazine advertisements.

#### THE SCHEDULE

It goes without saying that whatever advertisements appear in the magazines should arrive there as a result of a carefully planned campaign, of which the appearance of the advertisements in the magazines is just a part. The instantaneous writing of an advertisement to get it into the magazine just ahead of a closing date is very likely to be sinfully wasteful.

The advertisements should be planned to fit in with the other elements of the complete campaign and they should be worked out as a series. Once the general outline is laid down covering the sales ideas that are to be published, then steps can be taken to secure sufficient advertising ammunition to provide selling power for the series. With these sales ideas, the advertising ammunition, the necessary illustrations, and the data at hand, the building of the individual advertisements can be begun. Of course the treatment of the presentation of the message, the illustrations, the copy will be varied to harmonize with the character of every one of the publications in which the advertising is to appear.

The dates on which the advertisements appear in the various magazines should be based on a carefully made schedule. This schedule must recognize:

1. The relations of the time of appearance of any one advertisement in any one magazine to the dates of appearances of other advertisements in other magazines.
2. The relations of the various dates to one another.
3. All of the time elements of the complete campaign.

### THE AMOUNT OF SPACE

The amount of space to take in the technical and trade magazines varies in relation to the advertiser's pocket-book and to the objects to be accomplished. If the advertiser has plenty of capital available for advertising there is not great danger of being extravagant in the use of space, because the cost per unit of space is comparatively low. What real extravagances in the use of space by large manufacturers exist in practice are due to the unintelligent use of the space.

If the magazine is to be looked on as a directory by the advertiser who wishes to have his name and products listed there for the possible reference of buyers, then as much can be accomplished for this purpose in a quarter-page or half-page as in larger space. The small advertiser who can afford only a few inches of space, of course, can count on the full benefit of the directory value of the magazine. And a small space intelligently used, even can have considerable selling power.

The small space that is used intelligently will have more sales power than the large space that has a neutral tone—at least the small space will be much more economical. However, on the other hand, space is an important element in the sales force of an advertisement, and this force can be accelerated so greatly by increasing the space that it pays to take plenty of space in these publications, assuming all the other elements have been arranged on an economical basis.

*The Big Drive.*—Advertisers seemingly are not conscious of the possibilities of the use of large units of space in the technical or trade magazines as a means of dominating

their markets. The "big story" can be "put over" very effectively by the use of several pages per magazine per issue. Putting the pages in attractive colors, of course, increases the power of the "smash". The technical and trade magazines offer a great advantage to the advertiser contemplating a "dominating" campaign. He not only can insure that all of the readers of the magazines will see his spreads in color, but he can suit the treatment of each advertisement to the publication in which it appears. Thus he can combine the force of his mass, which accomplishes publicity, with the directness of his appeal, which accomplishes sales.

### CHANGING THE COPY

The advertiser who is trying actually to sell his product by means of his advertising will see to it that his advertisements are changed with each issue of the publication. The only exception to this rule is the advertisement that has proved its right for a second or third appearance by positive results obtained. It is as wasteful to change an advertisement just for the sake of changing it, as it is to run one advertisement indefinitely. But, let it be repeated, the only justification for a second or third insertion is that of proved results. Thus, a manufacturer might wish to obtain through advertising, a wide distribution of a catalogue. If the first appearance of the advertisement produced results it is logical to assume that a second insertion will also produce results, for the reason that, of a given issue, all readers do not see all advertisements. It would, therefore, be good advertising to continue such an advertisement until it ceased to pull well, or until the advertiser thought that the catalogue had obtained a sufficiently wide distribution. The great temptation with many advertisers, however, is to repeat the same advertisement, not because of the tangible results obtained but rather because of what charitably may be called "inertia".

## JUDGING THE MAGAZINE FROM THE EDITORIAL PAGES

*Well Defined Groups.*—Every technical advertisement should be addressed to a well defined group of buyers. The solution of the specialized problems of the buyers in this group is essentially the basis for the editorial contents of the particular paper. Consequently, if an advertiser will really sense the editorial purpose of the paper, or, to put it another way, if the editor of the paper has really sensed the problems of his industry, the advertiser will find the right way to reach the readers of that publication by studying intensively just what the editor does to reach them.

In the past, advertisers have been inclined to look upon technical and industrial and business papers as a whole as "trade papers". They have lumped all sorts of papers under this general heading, and have not realized that in the field of technical journalism there are cleaner-cut lines of editorial appeal than are to be found in any other class of publishing.

What the average advertiser has often called the "trade papers" may be classified first into two broad groups: (1) papers for direct buyers or recommenders of equipment or products, who really are a final consumer group; and, (2) papers for middle-men, having to do more concretely with "trade", as it relates to buying and selling.

The *American Machinist*, for example, is a paper belonging directly in the consumer group. It is not a trade paper, in the correct sense in which that word is used. *Electrical Merchandising*, on the other hand, is an example of a trade paper. A considerable amount of money is mis-spent by the unintelligent use of mediums without a clear conception of their editorial functions and purposes. The shrewd advertiser who first classifies papers broadly into these two groups, and then goes further to find the editorial appeal of these papers in the particular group, will insure the directness of the appeal of his advertisements in these papers.

*The Editorial Appeal.*—Take the consumer field of business papers, for example, and analyse it a little more fundamentally from the editorial appeal of the papers, and the opportunity for direct copy to certain groups will be evident. The editor of a class journal in the consumer field may be editing his paper for the business men of that field, for the engineers in that field, or for the common motives that bind that field together and make it an industry.

If the editor is directing his paper to the management field of industry, he will take up the problems of the field from the point of view of increasing out-put, or reducing costs, or improving the product, or increasing the profits. In other words, he will interpret the problems of the field from the point of view of the man who reads his paper. He will select from the field material that helps his reader, the manager, increase his profits or reduce his costs, or handle labor more effectively.

*Harmonized Copy Appeals.*—In this editorial motive is to be found a copy appeal for a certain group of papers, and advertising copy instead of being purely descriptive of the product can best be written for that paper by getting into it the same motive that guides the editor in his selection. An industrial crane advertisement, for example, may be written to show the technical features of the crane, or the general advantages of that piece of equipment, and it may command the attention of the reader of the technical journal. But if that journal has a management appeal, the copy will sing the same story as the editorial pages, if the copy writer, instead of talking about cranes, will talk about reducing the cost of handling material in a plant, and arrest at once the attention of the manager who is face to face with just that problem.

Take another example to show how the study of the editorial pages and an understanding of the editorial purpose of the paper will help in judging the value of a medium, and, what is more important, insure intelligent use of that medium. A manufacturer of mechanical

stokers may advertise in *Power*, in the *Electrical World*, or in the *Electric Railway Journal*. *Power* is read by men in responsible charge of power plants, and engine and boiler rooms wherever power is used in industry. The editor is interested broadly in the problem of making power plants efficient, and his primary appeal is to the men directly responsible for power plant efficiency. He deals with the technical problems of that efficiency, the buying, handling, and storing of coal, the best ways to fire coal, and so on. Copy on stokers that tells how stokers increase boiler efficiency, how they can be handled and operated in power plants, is effective copy for *Power*.

*Electrical World* also has to do with the problems of power generation, but from the point of view of the lighting company or central station. The lighting company managers and engineers who read *Electrical World* read it as manufacturers of power interested not alone in the problems of power plant economy, but also in the relation of the cost of power to the problem of selling power and utilizing it to get the best service. In the central station, the peak load on the power plant comes at evening, in most cases just as the night lighting load comes on the lines. The editorial section of *Electrical World* will have articles on how stokers meet these conditions in a plant. If a stoker manufacturer will tell how his particular stoker meets such conditions he will have used a kind of copy that has an immediate appeal to the manager of the plant, and that is in tune with the general editorial appeal of the paper in this particular field.

Similarly, the problem of power supply in another specialized field, that of the electric railway, may be treated in the *Electric Railway Journal*. The relation of the power cost to the operating cost of the railway is a subject in which the readers and editors of the *Electric Railway Journal* are intensely interested. The advertiser will register if he makes his appeal to the same readers by telling them how his stoker may help reduce the operating costs of the electric railway.

*The Editor's Leadership.*—It is not generally recognized how the editors of trade papers are moulding opinion with regard to the trade conditions of an industry, and how it is possible to make the advertising help get something done in a very real way. The editor of the trade paper is the natural third party in promoting trade reforms in an industry. Buyer and seller in a retail or re-sale field have natural differences in viewpoint. The buyer may not and cannot take one hundred per cent. the seller's point of view, and *vice versa*. Accordingly, the editor often has the opportunity for leadership by showing them their common relation to the final consumer and pointing out the advantages to be gained by co-operation, and not by competition, or by the more fundamental consideration of the individual benefits to come from the final consumer by better trade practice. The advertiser often may judge the strength of a trade medium by its success in helping to accomplish these reforms. The trade paper, with its paid staff of trained men in touch with all branches of the industry, usually can carry out more consistently and more intelligently what may be called a trade propaganda within the industry than can an association, because once its sincerity of purpose is recognized and its independence of thought established, it is obviously the vehicle for putting the forces of publicity behind a movement for good.

This relation between trade paper and the development of a field may be illustrated in the case of *Electrical Merchandising*. A few months before the Armistice was signed, the War Industries Board decided that manufacturers could no longer make and sell certain classes of electrical devices and appliances. Immediately, the editors of *Electrical Merchandising* saw in this the opportunity for leadership, to maintain as far as possible the sales organizations of the industry at a time when nothing could be sold. The paper turned itself into a medium for telling the trade how to carry out in detail the mandates of the War Industries Board, and showed in practical ways what could be done locally to hold trade, what could be done with



immediate stocks on hand, and so on. The advertisers, taking the cue from this appeal, showed in detail what stocks were available in certain lines, how they could be sold, what stocks or repair parts were available for making the alterations, and so on, with the result that very quickly the industry was put on a war-time basis without greatly disturbing the general sales conditions.

It is the editor's function to make his industry conscious of new problems, to lead it in the development of better methods and better practice. The value and strength of a journal as an advertising medium may often be judged by its relation to its field in this respect.

*The Dramatic Mass Appeal.*—There is one class of papers that includes essentially papers of the industry, specialized as to field, but not specialized as to the class of men reading them. The relations between the engineer, the manufacturer, the jobber, and the dealer in certain industries are so homogeneous that these men are all interested in certain broad problems of the industry as a whole.

As a consequence thinking men of all groups look to some one paper as a place for the discussion of the common problems of the industry. In a paper of this class, it is often possible to arouse an industry to action by the same dramatic appeal that the editors use in getting the attention of all these different readers. For example, in the electrical industry the development of our natural water powers is a subject of common interest to all the men in the industry, whether they have to do with the financial, engineering, manufacturing or the trade branches. Moreover, in this industry the lighting company that supplies power for the operation of electrical devices, in a unique way has relations to all these other branches of the industry. The editors of a journal like the *Electrical World* consequently talk to the thinking men of the whole industry.

The advertisers in the same way may talk to them, providing they sense the problem in this broad way and make their appeal to the common thinking of the industry. This opportunity to arouse an industry to action by drama-

tic appeal is something to which attention has only recently been called by the technical advertiser. As a practical matter this often can be accomplished by the use of liberal space or colored inserts. Such advertisements really can be made cross sections of the advertiser's relation to certain of these great problems of industry, and as a consequence can be written in the same spirit as the editorial pages.

In a recent number of the *Electrical World* there appeared a series of advertisements by many manufacturers planned designedly to arouse the industry to action in the development of our water powers. This series of advertising was essentially a follow-up on the broad interpretation of this problem to the industry itself. The idea gained force not alone because it presented the thought in large space, but because it emphasized in a dramatic way a fundamental idea in water power development and aroused the thinking men of the industry to their opportunities in this respect.

In the same way a journal like the *Engineering News-Record* has a tremendous editorial influence upon the highway program of the nation. The opportunity for crystallizing a constructive program of highway development exists in the advertising, as well as the editorial pages. The idea may be developed dramatically by any advertiser who sees this broad opportunity, and uses four, six, or eight pages of space to dominate and force the idea home.

*The Editor a Salesman of Ideas.*—Judging an advertising medium from its editorial pages, in short, means not only that the advertiser may classify the mediums in his field so that he will use these intelligently, but it means also studying the editorial pages from the point of view of finding in them the wave of appeal to the readers of his copy. The editor of any worth-while business publication is a salesman of ideas. The advertiser does not buy white space merely, but the editor's interpretation of the needs and desires of a group of readers which has given that paper individuality and makes its circulation distinct from that of another paper. Once the advertiser visualizes the technical journals in this light, he will consciously use them in-

telligently as a part of his sales program. The editorial pages of the technical magazine may be considered to be the multi-page advertisement to the readers, urging them to better methods, to improved quality, to better understanding of their industries, to greater profits. The advertising section may be considered as a multi-page coupon, each page of which is signed by an advertiser, who tells how his particular product answers the problems whose general solution have been suggested in the editorial pages.

#### WESTINGHOUSE ADVERTISING IN TECHNICAL AND TRADE MAGAZINES

Of the technical and trade magazine advertising of the Westinghouse Electric and Manufacturing Company, J. C. McQuiston says:

"Considering the very extensive range of electrical products that our company manufactures and markets, including many specific classifications and still more subdivisions, each designed for certain applications to numerous industries and human needs, it can be perceived readily that our advertisements, to reach all possible buyers, must find place in a great many and a great variety of technical and trade journals. Of mediums of this class alone, we advertise in one hundred and fifty or more.

"The fundamental principles underlying our entire advertising practice are essentially the same, but the forms or methods of presentation and the mediums employed, naturally must conform to the specific nature of the individual products and the various types of users. The appeals must be made to excite the particular interest of many classes of buyers and many types of each class, such as resale manufacturers, jobbers, dealers, contractors, and the multitude of users of each type in each classification. The selling points themselves and the nature and avenues of presentation thus present a wide variety: *e.g.*, the appeal on the feature of a quick turn-over would count strongly with the dealer, but would not interest the user, who could more readily appreciate the elements of simplicity of construction, durability and low maintenance cost.

"In a general way we desire so to impress the salesman with the necessity and value to him of advertising that he may perceive, with some vividness, its relation to personal salesmanship. The two form a close tie-up system of marketing.

"The following considerations underlying all advertising methods, as outlined by one of the Sectional Heads in the Supply Department is indicative of the processes employed by most of the other departments and sections.

*Apparatus on Which a Technical Appeal Must be Made to Operating Engineers.*—"A heading is sought that will attract the attention of an engineer who should be interested in the use of the apparatus.

"Illustrations are used that will also attract attention, and in some cases, as in the newer forms of electrolytic arresters, these include a diagram of connections to illustrate in a technical manner, the working of the device.

"The first statement under the heading, and which is made in rather prominent size of type, is sometimes a part of the large type heading, or sometimes a sequence to it, stating concisely what the apparatus will do, or where it should be applied, whichever is the more important message to be conveyed.

"In the general text of the advertisement, a more detailed description is given. This may be rather long in the case of certain apparatus where a new idea is to be brought out, on the basis that we have secured the interest of the man we wanted to reach and that he will read through a considerable statement of concisely recorded facts. On the other hand, in advertising older and better known apparatus, it is better to use only a few pertinent statements in bold face type covering its application and operation.

*Apparatus That Appeals to the Non-Technical Operating Man.*—"The same general lines are followed as the foregoing, except to eliminate any purely technical description and to bring out the convenience of installation, economy in operation, and the safety to operators. This class includes such apparatus as small lightning arresters, fuse boxes for distributing transformers, small circuit breakers and similar lines.

*Apparatus for Sale Principally to Jobbers or Other Resale Customers.*—"This includes such apparatus as knife switches, fuses, etc. and depends on the nature of the advertising medium; as for instance, the same advertisement to the operating man, as stated above, in such a paper as the *Electrical World*, would be advertised to the jobber-dealer and contractor, but differently in magazines going to only these two classes. While the general outline as stated above, would be followed, and the points to be brought out are partly the same points as mentioned in the second class above; in addition, any points would be included that will indicate the desirability of the apparatus as a resale proposition, such as high profit upon resale, satisfaction to the user, maintenance of stocks at different points in the country, etc.

*Reference to Follow-up Literature.*—"All advertisements should refer to the literature best suited to the class of customers addressed."

### THE MAGAZINES OF THE ENGINEERING SOCIETIES

An interesting development in the technical journal field is the recent reorganization of old publications or the starting of live new publications by the national engineering societies. These societies evidently are developing a consciousness of the great power they can wield for betterment in professional, industrial, and political affairs. Their publications naturally are their best means available for giving publicity to their aims and crystallizing the thought of their own members in such form as will serve as a stimulus for common action. These publications, of course, can achieve a very high editorial standard because the members of the societies can be counted on to supply much of the editorial material. And a member's professional pride stimulates him to do his best when he writes for the magazine of his own engineering society.

### ADVANTAGES OF TECHNICAL AND TRADE MAGAZINES AS ADVERTISING MEDIUMS

1. Great buying power per average reader.
2. The readers of a good magazine include practically all of the buying powers of the field in which the magazine circulates.
3. Technical products due to their very nature are bought largely on the "say-so" of technical men. Technical men read the technical magazines. The technical man who is really a prospect for the particular service of a product reads a certain technical magazine, in which the product can be advertised.
4. The best technical and trade magazines keep accurate classifications of their subscription lists. These afford the advertiser a means of defining accurately the interests and buying powers of the group reached by the magazine.
5. The advertiser can make a *direct* appeal based on the reader's interests as interpreted from what is presented to them by the editors of the magazine.
6. The magazine with a definite character is a reflection to the advertiser of a well defined group of readers, to whom he can address a definite selling appeal based on the service his product can perform for that group.
7. High circulation ideals.

8. Concentration in building circulation on "buying-power" subscriptions.

9. Best magazines will accept advertising only if it advertises a product whose use is more or less peculiar to the fields they cover. This is another feature that intensifies the concentrated power of these magazines.

10. The subscriber reads his technical or trade magazine with a "bread and butter" point of view, an interest comparatively easy to stimulate.

11. The integrity of the editorial standards.

12. Editorial columns of standard publications unbiased by special commercial interests.

13. Faith of the reader in "his" magazine.

14. Marketing and advertising counsel and service to the advertiser.

15. The prices charged by the publishers per unit of space are comparatively low.

16. Lack of waste circulation.

17. The limited field of any particular technical or trade magazine, the definition of this field that can be established by a study of the editorial columns, the great average buying influence of the readers, the directness with which the prospects can be reached, and the low prices per unit of space, all go to make the trade and technical magazines effective, economical mediums for advertising technical products.

#### NEGATIVES

1. Probably the greatest adverse criticism that can be made of the technical or trade magazines as mediums can be based on the great masses of advertising that single issues of some of the publications contain. It is not uncommon to see a magazine carry four hundred solid pages of advertising with perhaps only fifteen to twenty per cent. editorial matter. It goes without saying that every page that is added to the advertising section after a certain reasonable limit has been reached depreciates the sales value of every other page of advertising already there.

2. The colored inserts that appear to an increasing extent in some of the trade and technical magazines are evidence of the fact that the advertiser appreciates the small chance of having his advertisement seen in such a great mass of advertising as appears in some of the technical and trade magazines. Incidentally, the fact that the publishers sell the advertiser colored inserts constitutes a recognition on the part of the publishers that some means is necessary to attract attention in such a mass of advertising. Of course, each colored insert in the advertising section depreciates the advertising pages that are taken in the normal

way and that must just run a chance of being noticed. The more inserts that are run, of course, the more the value of the inserts themselves becomes depreciated.

3. The publication of "special issues", which carry an extra mass of advertisements and additional editorial material, the total span of which is far greater than any span of attention the average reader of the magazine possibly could be expected to have for it.

4. Lack of some means of getting the reader over into the advertising section. Of course, the presumption can be made fairly that he goes there, anyhow, of his own accord. But, after all, this is a presumption, and some means should be used of insuring his getting over there. Perhaps, an interpolation of the editorial matter into the advertising section is the solution of this.

5. Too many editions of some of the magazines, considering the lack of news value in their editorial pages. Lack of the news element makes frequent editions unnecessary; fewer editions would raise the editorial standards of the material published. Also, too frequent editions of a publication that is lacking in news appeal deadens the reader's responsiveness to the publication, including the advertising in it.

6. Of course, not all technical and trade journals are equally good. Some of them have little to recommend them, and it is strange to note the benevolence of some advertisers in helping keep them alive. These publications are superficial, and make no sincere effort to achieve the high editorial standards that are necessary to insure reader interest. Possibly the advertiser realizes this but feels that the cost is so low for the space used that he can not be very badly wrong about keeping the publication on his list; and he feels that he will take a chance on the advertising in it doing some good, in proportion perhaps to what he is paying for it.

#### COMPARISON OF ADVERTISEMENTS IN TECHNICAL AND POPULAR MAGAZINES

A comparison in general of the advertisements of technical products appearing in technical magazines on the one hand and in popular magazines on the other was drawn by the purchasing engineer who criticized the advertisements shown in Chapter XXII. About fifty advertisements of technical products were sent to this engineer equally divided, technical and popular. The purchasing engineer volunteered the following general comparison of the advertisements:

"On the whole, I believe the advertisements in the technical magazines are better gotten up and are more to the point than those shown in the popular magazines. In fact, I think a great many of the technical magazine advertisements could well have been used in popular magazines.

"In discussing these advertisements, I have attempted to take the viewpoint of the reader of the technical magazine and I am presuming that he is a little better informed with reference to the product described than the man reading the popular magazine advertisements.

"The general criticism that I would make of the advertisements shown in the popular magazines is that they are too complicated and therefore not easily absorbed at a glance by the reader. The reader of the advertisements of the popular publications generally glances through them with more haste than does the reader of the advertising section of the technical publications. The reader of the advertisement section of the technical magazines is usually looking for information, whereas the reader of the advertisements in the popular magazines usually has this work more or less thrust upon him because of the fact that the reading matter for which he purchased the magazine is extended through the advertisement section. For this reason, the technical advertisement in the popular magazine should be shorter, more concise in its statement, and more easily absorbed than the advertisement of similar nature appearing in a technical magazine.

"This is of course a digression from the work which you have asked me to do, but I am going into this detail simply to explain the viewpoint which I have adopted in criticising these advertisements from the buyer's viewpoint. By a buyer's viewpoint, I mean that viewpoint of the man who influences the buyer. This man we might term the secondary purchaser. It is of course to reach this secondary purchaser that the popular advertisement, as I understand it, is used.

"On the whole, I think that the advertisements of technical products in the technical magazines are much superior to those of technical products in the non-technical magazines. But there are of course exceptions."



## CHAPTER X

### THE POPULAR MAGAZINES AND NEWSPAPERS

Large element of speculation—An illustration of when to use national advertising—The economic factors to be considered—Westinghouse advertising—Making the appeal fit—Newspapers—Choosing the magazine or newspaper.

#### LARGE ELEMENT OF SPECULATION

The very nature of advertising causes an element of speculation to be included in any campaign that is planned. It is not possible to predict accurately how the series will "get across", to tell in advance just how a piece of copy will "pull". In the more conservative forms of advertising the technical product, however, it is possible to reduce this speculative element to a minimum, because, although the total appropriation may be large the amount of money actually spent in any particular medium is comparatively small, the limits of the medium are well defined, and it is possible to establish means of checking returns from the medium.

Advertising the technical product in popular magazines and newspapers is often highly speculative. The appropriation for the campaign involves the spending of a considerable amount of money, it is extremely difficult to forecast any tangible results, and it is frequently impossible to trace any direct effects of the campaign after it is concluded. Some of the money spent in this way, it is true, secures handsome returns, far bigger returns than could have been secured by "plugging" along in a more conservative way. In general, however, so far as advertising the technical product is concerned, until more data have been amassed to guide the technical advertiser in his use of the mediums of general circulation, these mediums must

be "played" as a "long shot" with the accompanying chances of gain or loss.

As has been stated in Chapter II, this book interests itself in the intelligent, aggressive publicity that is concentrated directly upon increasing sales. Little consideration has been given to any other factors that may influence the manufacturer of a technical product to start a campaign, or to consider an increase in his present advertising appropriation. The present discussion of popular mediums is confined, therefore, to this point of view.

#### AN ILLUSTRATION OF WHEN TO USE NATIONAL ADVERTISING

There is a point in the development of the sale of the technical product where the use of popular mediums is perfectly logical, but to use such mediums before the proper time is to invite financial loss. By way of example, the sale of a rear axle for trucks will be considered, and, step by step, the development of the advertising will be sketched from the time of the conception of the business to the time of a wide adoption of the product.

At the start, comes the trade paper campaign. As the advertising appropriation is a modest one, one or two of the trade papers going to the truck manufacturers may be used. This advertising is co-ordinated with sales work in the field and direct-mail matter. This work results in the adoption of the axle by a limited number of truck manufacturers. The advertising appropriation may be increased; more space may be taken now, in the present papers; a paper going to dealers may be added; and a list of dealers can be added to the direct-mail campaign.

This expansion of the advertising, backed by sales work, results in the further adoption of the axle. The business seems on the high road to success, and the general manager turns wistfully toward advertising in the popular mediums, with the thought of increasing sales with greater rapidity. At this point in the development of the business, it

is inviting failure to advertise in magazines of national circulation. For the business is comparatively young, "bugs" in the product have yet to be removed, and the potential market has been developed only to limited degree; moreover, national advertising would cause a drain upon the finances of the company. It is at this period that many a business has been injured by a hasty decision to "play a long shot". The argument is advanced, perhaps, that there are sufficient funds available to carry on a national campaign for a year and that such a campaign will put the business positively on "easy street". A fallacious argument indeed! It is far better for the manufacturer at this turning point in his road, to establish a sinking fund for national advertising to be done in the future, and to spend his remaining surplus on personal service work with his customers and their dealers, on broadening his direct advertising, and on concentrating the work of his sales division at the points that offer the greatest sales prospects.

Up to this point the dominant idea has been to get orders, to obtain sufficient volume to keep the business going; and little attention has been paid to the territorial sources of these orders. Having established a certain momentum in this way, the manufacturer now has sufficient time to make a thorough market analysis. If this is done, it will show that the market in certain territories has been saturated to but very slight degree, whereas a higher percentage of business has been obtained in other territories; it will show that, whereas dealers in some territories have been educated thoroughly, the dealers in other districts have been neglected. The analysis will show the sales possibilities of concentrating selling and advertising into weak territories and the importance of establishing dealer good will there by means of the personal work of the sales and service departments.

Such a course leads to the time when the product has been improved and perfected, when the truck manufacturers have been schooled on points of installation and the

dealers on points of maintenance, and when there is a sinking fund for the further expansion of the business. The manufacturer can feel now that he has wide representation, that the sales volume from all territories is fairly well balanced, and that advertising in the popular magazines can be considered as a means of educating the ultimate buyer, thus helping the truck manufacturer, and as a "binder" for his whole sales effort. He can feel that his representation parallels throughout the national market the sales efforts of his contemplated national advertising.

It is at this point that many manufacturers do not appreciate the possibilities of national advertising. It is at this turning point in the life of the business that the policy adopted will keep the business a small business or make it a national institution. It is at this point that national advertising should be adopted to stabilize the business and to develop it into a national institution.

Advertising in the popular magazines is preparing the great field of business for intensive cultivation. It is plowing and harrowing, preparing the soil. But if the business man would reap the maximum harvest in sales he must have the capital and organization to cultivate the field after the soil has been made ready. If he has the necessary equipment to work each acre intensively and to harvest the crop of every acre, then the money spent on preparing the field, on advertising in the popular mediums, will prove a sound, profitable investment.

#### THE ECONOMIC FACTORS TO BE CONSIDERED

The authors have no general objections to the use of popular mediums for advertising technical products. It would be absurd to raise such a general objection. But the authors do object to some of the uneconomical practices that exist in the use of these mediums by manufacturers of technical products. The suggestion is made, therefore, that before a campaign in the popular mediums is finally decided upon, the following points be carefully considered:

I. *A complete analysis of the product and its component markets.*

1. The product and the broadness of its application and use.
2. The degree to which the product is technical.
3. The degree to which the product is a specialty.

A specialty must be sold by demonstrating its possibilities for service under specific conditions peculiar to various definite fields. An appeal for such a product that simply "blankets" a great many fields will not sell the product.

II. *The number and distribution of the prospects.*

1. The total number of prospects (plants or companies) for the product.
2. The buying powers (president, superintendent, engineer, purchasing agent, etc.) effective in influencing the purchase of such a product.
3. Is the buying influence usually concentrated? Or is it expressed as the result of conference?
4. From 1, 2, and 3, the total number of buying powers (persons).
5. Of the total consumption of the product by all of the prospects, what proportion is concentrated among a comparatively small number of prospects?
6. Of the total consumption of the product by all of the prospects what proportion is concentrated in a few industries?
7. Of the total consumption of the product by all of the prospects what proportion is concentrated in a few localities?

III. *Comparison of mediums.*

1. The manufacturer of food stuffs, clothing, household equipment, can capitalize the value of the space in the publication at a certain rate. This rate is an important element in fixing the price for the space. The price is the same to all advertisers. The manufacturer of a commodity that has a universal appeal to the readers of the publication can make an economical use of the space. The manufacturer of the technical product makes a use of the space that has no influence in fixing the rate of the space. He pays this rate and competes for attention with the advertisers of general commodities. All of the conditions of publishing, the editorial appeal, the advertising policies, the advertising service, the advertising rates, are based on an effort by the publisher to give service to the advertisers and make the advertising economically sound for general commodities. These conditions are all made by the publisher intensely peculiar to making the advertising pay, the advertising of general commodities. The conditions are not at all nor-

mal to making the advertising of most technical products pay.

2. What means of advertising and selling are available for accomplishing sales results more directly with the same amount of money as the popular campaign would cost?

#### IV. *Means of supporting the popular campaign.*

1. For the period of the popular campaign, is full provision to be made for the co-ordination with it of the other advertising mediums that work directly to clinch sales?
2. Are all of the parts in the mechanism of distribution for the product complete and strong enough to insure an efficient functioning of this mechanism to reap the potential harvest created by the popular campaign?

*Further Wastes of Circulation.*—Much of the circulation of a popular medium, so far as the advertising of the technical product is concerned, is waste under any circumstances, because so many of the readers of that publication belong to the classes and types that have absolutely no influence over the purchase of any technical products.

In the preceding statement of factors to be considered in judging the economics of advertising in popular mediums, the factors five, six, and seven of II. suggest further wastes of circulation that may occur in the case of a particular product.

An analysis of factor five may show for instance, that although there is a total of 200,000 prospects for the product in the country, 75 per cent. of the total sales volume is consumed by 20,000 prospects.

An analysis of factor six may show that the consumption of the product is confined almost entirely to one industry or to a few industries. Obviously, then, the advertising to the other industries is a waste.

An analysis of factor seven may show that the prospects for the product are concentrated in one locality or in a few localities. Few technical products can be sold without sales-clinching follow-up. The manufacturer naturally will have his sales forces concentrated in the localities where the prospects are concentrated. Advertising, then, outside of these localities is largely waste.

*Proof Needed.*—In other activities of his business the manufacturer demands a certain proof of prospective returns before he will appropriate money for promoting a particular activity. And finally, he demands an accounting of the expenditure of such money in relation to the results it accomplished.

While the practice is really not general, many technical products are being advertised in the popular magazines. This indicates that some of the manufacturers of technical products have a "hunch" that the practice can be made profitable.

It would be very foolish to say, finally, that advertising technical products in national magazines cannot be made economical and profitable. But at the present time there certainly is little proof available of its having been made generally economical.

*Some Exceptions.*—Of course, some technical products can be advertised economically in the popular magazines, provided that a wise choice is made of such publications, and that the proper adaptation is made of the message to the particular magazine.

The following are suggestions of types of technical products that have a sufficiently broad distribution to justify some use of popular magazines: motor trucks, trailers, tractors, parts and accessories for these; products sold to manufacturers to be included as parts or accessories of equipments that have a broad general consumer distribution; buildings and elements of buildings; household appliances that are technical and must be sold on the same appeals that sell more truly technical products; products that have a broad distribution to both technical men and general consumers, like wrenches.

#### WESTINGHOUSE ADVERTISING IN POPULAR MAGAZINES

The advertising of the Westinghouse Electric and Manufacturing Company affords an excellent example of technical advertising in popular magazines that is economically

sound. The Westinghouse Company is a national institution. Its activities and products affect the daily life of individuals of every class and type in the country. Its distribution system blankets the country. It has countless points of contact with the national buying public. The national advertising in the popular magazines creates a consciousness in the public mind of the Westinghouse institution, a confidence in this institution. And confidence is the foundation upon which big sales and a big business institution are built.

J. C. McQuiston of the Westinghouse Electric and Manufacturing Company says:

"The popular advertising of the Westinghouse Company is not an assortment of separate advertisements fortuitously arranged, but a carefully planned and scheduled series of advertisements having a definite end primarily in view. This end is the building up of the prestige of the name Westinghouse in the electrical and allied fields, and the creating of a preference for Westinghouse products as a group, rather than for any particular products.

"The series of advertisements are of two distinct types:

"(a) Those dealing broadly with the general use of electricity affecting human welfare and showing the part that Westinghouse has played in its development, designated "institutional" advertisements.

"(b) Those dealing with specific products—household appliances, fans, motors and automotive equipment—in which the general public has a direct interest, spoken of as specific advertisements.

"The whole campaign has, however, the 'institutional' effect because of its chief aim. Therefore in the selection of magazines, the chief consideration is given to their value as institutional mediums, rather than their value as advertising mediums for the specific products.

"The mediums used most largely for our popular advertising are those that reach a wide circle of readers of means, well distributed over the country. These mediums are at times supplemented by others of less wide circulation, but reaching selected classes of readers for the advertising of specific products.

"The preparation of the popular advertisements is in the hands of Fuller and Smith, an advertising agency of Cleveland, Ohio. This agency has made a thorough investigation and analysis of our business and is familiar with all details of such work. It prepares suggestions for advertisements to fit in with the plan adopted by us each year, and from the accepted suggestions, prepares advertisements, which are subject to the approval in every detail by the Westinghouse Department of Publicity."



### MAKING THE APPEAL FIT THE PUBLICATION AND THE PRODUCT

Once a campaign has been decided on to include popular magazines care should be taken in preparing the series of advertisements for the several magazines to make the appeal to the readers of the particular magazine in which it is to appear. If the editorial pages reflect a distinct type or class of readers as interpreted from their presumed interests then the appeal for the product should be addressed to this type and based on their interests.

Of course many of the magazines that are used for advertising technical products are very broad in their distribution and reach a great variety of types and classes. The magazines adhere in their editorial sections to the materials that appeal to the common interests of all the various types and classes of their readers. The advertiser of the technical product however, should not make the common mistake of basing his appeal for that product on the common interest of the entire reader group; his appeal should be made to the common interest of the reader-prospect group of that particular magazine, to the group of readers of the magazine who influence the purchase of such a product. The other readers do not count, so far as sales possibilities are concerned.

Many a technical advertisement in the popular magazines reflects an effort on the part of the advertising man to "write up" to the standard of the magazine. He gets too far away from the sales point. This is due probably to his visualizing the average reader, when preparing the message, instead of visualizing the average reader-prospect.

### NEWSPAPERS

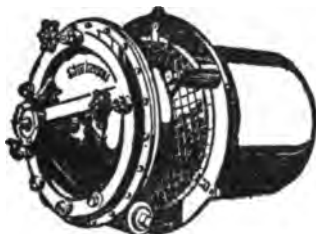
Newspapers are seldom economical mediums for advertising the technical product. However, their use to a limited extent may be justifiable in the case of the classes of technical products that have a sufficiently broad distribution to justify some use of popular magazines.



## Burn Cheaper Fuel—Get More Power



In the Hotel Oliver, South Bend, Indiana, a Sturtevant Turbo-Undergrate Blower, in a special test, raised a 150 horse-power boiler to 309 horse-power. This 205% of increased power was reached on coke breeze.



**Turbo-Undergrate Blower**

**S**TURTEVANT Turbo-Undergrate Blowers were designed in accordance with the Sturtevant principle of putting air to work. These compact units are built like every other Sturtevant product—strong, rugged, and capable of doing more work than other makes with the same ratings. During the past sixty years many manufacturers have found that the extra strength and longer life of Sturtevant machinery are a paying investment.

Sturtevant Turbo-Undergrate Blowers secure the advantages of mechanical draft at small expense. Cheaper grades of fuel can be burned, yet the boilers will generate greater pressure than formerly. These small units increase the flexibility of boilers, enabling a plant to easily meet peak loads.

An installation of Sturtevant Turbo-Undergrate Blowers is only a matter of hours. No costly equipment lies idle when the load is light. This form of mechanical draft is intended for boilers ranging from 50 H.P. to 400 H.P.

A Sturtevant representative will gladly tell you about the savings these undergrate blowers effect. Write, phone, or wire for him.

Telephone: Murray BR 9220

### **B. F. STURTEVANT COMPANY**

F. S. Krag, District Manager

52 Vanderbilt Avenue New York

Fans Blowers Engines Turbines

The use of newspapers is justifiable for such a product. Well written, well displayed advertisement.

Newspapers are concentrated in their territorial distribution but extensive in their circulation to a great variety of classes and types. This extensiveness as to classes and types is somewhat restricted in the few centers of large population, and in a few other special cases.

There are few grounds on which the newspaper can claim a right to consideration in the general campaigns for technical products. However, special campaigns often can include the use of the newspaper to good advantage.

A manufacturer making a concentrated sales attack during a certain period on a territory like the Metropolitan District (the territory including and contiguous to New York City) might profitably back up his field work and other advertising with a campaign in the New York newspapers for the same period.

A manufacturer selling mining supplies in the Coeur D'Alene District, Idaho, might profitably advertise more or less continually in *The Press Times*, the newspaper published in Wallace, Idaho, the center of the district, and distributed extensively and intensively throughout that district. The entire interest of the district is mining. The newspaper there offers a concentrated circulation for the use of the manufacturer of mining supplies. And a direct appeal can be made in the advertising to a well defined group of prospects.

At times the manufacturer and dealer can co-operate to advantage in advertising in the newspapers. There might be such a great waste of circulation in the case of the particular product as to make advertising it in the newspapers unprofitable, but the dealer can secure for himself by this means, publicity which he can capitalize to a certain extent in connection with the promotion of his sales of the other products he carries.

#### CHOOSING THE MAGAZINE OR NEWSPAPER

The value of a popular magazine or a newspaper as a means of advertising the technical product depends upon:

1. The relation between the circulation of the magazine or newspaper in various territories and the distribution or prospective distribution in these respective territories of the product to be advertised.

2. The cast and character of the editorial material. From the editorial section of the magazine or newspaper can be interpreted the types and classes who will read it. Do these types and classes influence considerably the purchase of the product to be advertised?

3. The total number of readers of the magazine or newspaper who exercise a buying influence over such a product.

4. The cost of space.

The total number of readers of the medium who exercise a buying influence over the purchase of the product depends on the total circulation and the character of the editorial service. The character of the editorial service must be studied carefully and interpreted in terms of its power to stimulate responsiveness on the part of the types of readers who are considered as prospects for the product to be advertised. The responsiveness depends on the reader's interest in the editorial matter presented and his confidence in the publication.

The popular magazines are generally national in their circulations, of course, but these circulations should be studied for the possible development of any interesting relations between them and the territorial distribution of the manufacturer's prospects.

The unit cost of space is the total cost of the space per issue of the medium divided by the total number of reader-buying-influences reached by that issue.

## CHAPTER XI

### DIRECT MAIL ADVERTISING

Low standards exist in direct mail practice—A powerful sales auxiliary—  
The appearance of the pieces—The mailing lists—The various forms  
of mail pieces—Series or unrelated pieces—Each piece a part of the  
campaign.

#### LOW STANDARDS EXIST IN DIRECT MAIL PRACTICE

During the period of the war the Paper Economy Division of the War Industries Board expressed the opinion that there was much waste in direct circular advertising, whereupon *Printers' Ink* made the following editorial comments: "Wouldn't it be a pretty convincing argument to suggest that in the present paper stringency circulars be only of such a kind as actually can be bought from? . . . . The Paper Economy Division expresses the opinion that many circulars, far from selling prospects, actually create an unfavorable impression in their minds. Such circulars impress the officials as contributing much to the wastage of paper. It must be admitted that some, or even many, direct-mail circulars are wasteful. . . . Much of the trouble has been that direct-mail solicitation is so easy and inexpensive as compared with the traveling salesman system that it is likely to be overdone or done without enough discrimination."

This editorial goes on to explain the importance of direct-mail details, such as lists and the preparation of the direct-mail piece and concludes as follows: "There is nothing wrong with circular advertising matter as such. The trouble is so many people don't know how to use it. . . . Direct-mail selling as it is practical in some quarters needs revision from within. It ought to be changed from the general to

the specific. If this could be brought about there will be less talk of waste—less reason for it anyway. And, incidentally, more business would be gained.”

No more conclusive proof of the truth of these editorial comments can be obtained than to collect for a period of two or three days the various pieces of direct-mail matter that are received by every house and to give them careful study. And while this evidence will prove the statements made by *Printers' Ink*, it will show also the great possibility for the properly designed piece of direct-mail matter, for all of these pieces gained the audience of the person sought and all had opportunity to deliver their sales messages.

#### A POWERFUL SALES AUXILIARY

Direct-mail advertising has elements that make it a necessary adjunct to any campaign.

For example, it can be directed into a special territory. If the product advertised is a new product and sales areas are to be opened gradually, trade paper advertising can accomplish missionary work in a general way while the direct-mail advertising can be concentrated into the sales territory decided upon. Properly worked out it can bring definite inquiries from that territory, thus automatically routing the salesman with a minimum of lost time. If the product is well established, direct-mail advertising can pave the way for a salesman's call and during the period between his visits keep the customer sold on the product.

By way of illustration of the efficiency of direct-mail advertising in helping the salesman in the field, CALKINS and HOLDEN in their book, *Modern Advertising* relate this incident: A house that makes babbitt metal, hitherto always sold by travelling men, was induced to try a “Mail Series”. To make the test thorough, a state in which the house had had no previous trade was selected. To a list of prospective buyers they sent printed matter, one circular a week for thirteen weeks. Then they sent a bright young man to travel over this territory. The results were phenom-

enal. Order after order was sent in, and finally a request was made by the salesman for a year's contract at an advanced salary. He got it. When he arrived at the home office he was the hero of the hour. He sat at the desk of the "old man" and explained how he did it. When the man who had put up the money for the "mail series" ventured to suggest that the circulars might have had something to do with results, the drummer airily "turned down" the suggestion. He had sold the goods himself. The mail series had not been heard from.

The company, realizing that they had a treasure, gave the young man virgin territory in another state. Never a drummer and never a single piece of printed matter had previously gone to that state. The young man started out with flying colors. He "fell down" at the first stop. After trying six or seven towns, without getting even an audience with his customers, to say nothing of an order, he was called home. The entire success of the salesman in the first instance had been based on a careful cultivation of the territory by the right sort of printed matter.

### THE APPEARANCE OF THE MAIL PIECES

There are many forms in which direct-mail matter can be used and these are discussed here separately with suggestions as to their places in the campaign. The general truth of attractive appearance however applies to all. Yet if one were to study a two or three days' collection he would observe that for some unknown reason, many houses that are most particular as to the appearance of their salesmen are most careless when it comes to their printed salesmen. Many advertising managers and sales managers apparently overlook the fact that a prospect's opinion of a house is gained unconsciously from the appearance of its advertising matter.

The sales manager would not permit one of his salesmen to "bawl" at a prospect or at a customer as the only way of getting himself heard, but rather he would expect the

product to be sold by the weight and the completeness of the argument. He would expect his representative always to carry himself as a gentleman. Again, he would not permit of his salesman's wearing a light green suit, a pink tie and lavender spats in order that the salesman might appear "attractive".

And yet this same sales manager will approve of direct-mail pieces that "bawl" in the great loud type and depend upon glaring colors for attractiveness. Mailing pieces are printed salesmen, and dignity and refinement together with artistic, attractive appearance are essential.

### THE MAILING LISTS

The back-bone of the direct-mail campaign is the mailing list. It is an advertising axiom that the direct-mail campaign is only as good as the lists are accurate.

The class of names to go on the list should be established by the market analysis; and where possible the exact buying unit, *i. e.*, engineer, superintendent, purchasing agent etc., should be determined upon and the individual name used rather than the name of the company.

There are many sources from which names for the list can be secured, the most accurate list probably being that obtained through the salesmen in the field. While it is not desirable to burden the salesmen with more clerical duty than is absolutely necessary, they can be sold on the mailing list idea because of the advantages accruing to them.

In building a new list the salesmen can obtain names from the boards of trade, banks and newspapers in the town and cities that they visit. In the smaller cities the telephone directory often lists under the name of a business, its officers and it is usually possible for a salesman to "borrow" such a directory or, this being impossible, to copy the individual names. Again, names can be obtained from the salesmen's reports of calls.

One of the authors, when advertising manager for a large manufacturing company, was called to the reception



room one day to interview a salesman from a certain steel company. This salesman explained that their advertising manager had requested that they obtain names of the officers of all companies called upon, and further, had made the suggestion that such information be obtained from advertising managers. This is mentioned here by way of illustration as to how a salesman can obtain the names; often, a purchasing agent would hesitate to supply such information even if the salesman felt inclined to ask it but a request from one advertising manager to another would not likely go unheeded. Carlyle's "infinite is the help man can yield to man," applies possibly more to help from advertising manager to advertising manager, than from purchasing agent to advertising manager.

A second but not as efficient method of obtaining names, was used with fairly satisfactory results by a manufacturer of a mechanical speciality. This speciality was one that could not be used in every factory, and yet it had such a wide range of application that it was impossible to classify, by nature of product, all possible purchasers. A mechanic who had worked his way around the country was employed to select names from Bradstreet's and Dun's. He was familiar with the specialty and its applications, and familiar in a general way with different lines of manufacture. After some months, and at a cost of several hundred dollars, this manufacturer had a list of several thousand names; to be sure, there were no individual names, but it was a list of financially responsible companies each of which could use the specialty.

A source of consumer names is the dealer selling the product.

Another source of names is the purchased list. In almost every large city there are brokers and agencies that make a specialty of compiling lists and the charge ranges from one cent to ten cents per name depending upon the nature of the list.

For advertising a technical product, however, the value of such a list is questionable. It is difficult for an agency

to determine the difference between a stationary engineer and a mechanical engineer. To them an engineer is an engineer. Again, to such an agency a machine tool company is a machine tool company regardless of whether it is a selling company exclusively or a manufacturing company. An agency of this character can supply lists of manufacturers above any given financial rating but with such a general list its ability to serve the advertiser of a technical product ends.

With the list once established its value depends upon its being kept up to date. Quickly, unless it be checked against carefully, it can become so filled with "dead wood" that it is a liability rather than an asset.

Here, again, are the salesman's reports of great value to the advertising department, for the report, if properly designed, advises of change of location and change in personnel. The trade and technical papers afford a checking system in the columns where they report the news of the men in the industry. A third and of course not to be overlooked source of checking, is the pieces returned to the sender. Here it is not amiss to mention the fact that postmasters are permitted by government regulation, to cross off names of companies that have moved, but are not permitted to supply names and addresses or to advise of the new location.

A manufacturer who has a very wide mail distribution on a monthly house organ uses the following plan to keep his mailing list to date: When a name is added to the list, four envelopes addressed as containers for the house organ, are made out and filed. In the fourth envelope is placed a postal card which must be returned to the manufacturer if the recipient wishes to continue to receive the house-organ. When the postal card is received four more envelopes are made out and filed with a return postal again placed in the fourth envelope. Thus, this manufacturer checks his entire list three times a year, his only list being the addressed envelopes.

The directories of the national engineering societies list-

ing the members by states and towns and giving their complete names and titles are good prospect lists for technical products.

### THE VARIOUS FORMS OF MAIL PIECES

Before considering the different forms of direct-mail pieces, mention should be made that no hard and fast rule can be established whereby it may be determined where one form is more desirable than another, or where one form would fit better than another into any given part of the campaign. For these are questions that can be answered only when the nature of the campaign, the product, the class of list, are known factors. Obviously a manufacturer of packing would be foolish to send a blotter to a list of stationary engineers or a belting manufacturer a reproduction blue-print of belting lay-out to a purchasing agent. As to the use of direct-mail pieces of various forms only a few suggestions will be made.

*Blotters.*—Blotter advertising can be used in several forms. It can be a single blotter, or several blotters with a celluloid cover, all held together by a fastener. It can carry any form of advertisement and be used as a series of mail pieces or as one piece in a series. In the former use it usually has printed on it a calendar or carries a monthly sales message, whereas in the latter application it contains one part of the sales message which as a unit is conveyed in the whole series.

The value of a blotter as a direct-mail piece is open to debate. While it is an article of utility, experience and tests have established the fact that it has no longer advertising life than any other form of direct-mail piece. This statement might be challenged on the ground that because the blotter is an article of utility, it will be kept, it will be used, whereas a folder or booklet would be thrown away. The truth is best demonstrated by the reader's attempting to describe what the advertising blotters on his desk advertise.

Before leaving the blotter as a direct-mail piece mention

should be made of one received some time ago that had distinct advertising value because of one outstanding feature. This blotter was double the size of an ordinary blotter and folded in the center; the only advertising message it carried was the name of the company sending it out, but its distinctiveness lay in the fact that printed on the blotter was the recipient's name. Thackeray has it that, "vanity is often the unseen spur" and in this instance it was the spur that assured for that blotter always a prominent position.

*Folders.*—The name "folder" covers a wide range of direct-mail pieces and is the piece most often used. It may range from a piece of one single fold, measuring as small as three by five inches, to a complicated piece of several folds and of large size, and in all weights of stock from a medium weight paper to a medium weight board. It may be self-covering or mailed inside an envelope. Frequently it carries with it, either as a part of the folder or attached to it, a return postal card which makes easy the placing of an order or simplifies the request for additional information.

*Sales Letters.*—Sales letters constitute an important part of the direct-mail campaign. These may be multigraphed with the name and address filled in, or may be individually typewritten. One pronounced disadvantage of the multigraphed letter is the difficulty to be experienced in filling in the name and address so that it will match with the rest of the letter. The form letter is a personal appeal; it is a letter supposed to be dictated and individually typewritten and therefore filling in that is poorly done defeats the purpose. The disadvantage of having each letter individually typewritten is not so much a matter of expense as of time consumed where a large number of letters are to be sent out. As a middle course mention is made of the Hooven typewritten letter. To all intents and purposes this is an individually written letter in that the name and address are typed by an operator, but the body of the letter is written automatically and on the same machine. Thus the opera-

tor, having to type only the name and address can operate many machines at once, with the corresponding reduction in cost over the individually written letter and with the advantage of quantity production.

Where a manufacturer contemplates the use of form and follow-up letters in his campaign, thorough study should be made to insure using letters to the greatest possible advantage.

Let us take by way of example a manufacturer whose product is sold through a mill supply house to the user. Simply to send out one letter or a series of letters to either the dealer or the user is not making the greatest possible use of this form of direct-mail advertising. It is well to obtain a bird's-eye view of the letter possibilities by laying out a table, which, for example, might appear as follows:

*Letters to Dealers.*

1. To develop new dealers.
2. To refer to dealer an inquiry.
3. To advise that factory salesman will call.
4. To follow salesman's report of call.
5. To acknowledge order given to salesman.
6. To offer "dealer helps".
7. To suggest various uses of "dealer helps".

*Letters to Dealer's Salesmen.*

1. Advising that dealer is going to handle manufacturer's goods.
2. Advising of contemplated visit of factory salesman.
3. Thanking for assistance given to factory salesman.
4. Advising how certain classes of buyers can use goods.
5. Offering help of factory salesman on any particularly difficult prospects.

*Letters to Prospects and Users.*

1. To advise that dealer is handling product.
2. To suggest how purchasers in similar fields have used goods.
3. To thank for order given dealer.
4. To advise of contemplated visit of factory salesman.
5. To inquire how product is operating.
6. To advance sales arguments for product.

*Following up Inquiries from Other Advertising.*

1. To acknowledge receipt of inquiry.
2. To advise of dealer's name.

3. To determine specific requirements that proper catalogue may be sent.
4. To accompany catalogue.
5. To inquire if catalogue was received.
6. To inquire if dealer has rendered service.

With a table of all the letter possibilities in front of him the manufacturer can determine which letter he feels will accomplish the most good for him, taking into consideration the peculiarities of his sales problem.

*The Follow-up Letter.*—The form or follow-up letter must of all things be sincere. The writer of it must have all the attributes of a salesman in the field. He must have faith and confidence in the offer that he is making, for there is an undefinable something that is between the lines of a letter, that is understood as easily as the words are read. And if the spirit prompting the letter is one of, "I must make this letter pull a reply" rather than, "I am offering this man good value and good service"—that spirit dominates every word and every line and is unconsciously felt by the recipient.

Short, "peppy," snappy sentences do not belong in the form letter. For these smack of smartness, of cleverness, and are resented by the average man. A salesman who enters an office as a total stranger and, throwing his hat to a chair, strides across the room to greet his prospect with a slap on the back does not have opportunity to make many calls. And yet form letters are received daily that have an air of ill bred familiarity about them, that the house sending them out would not countenance for one minute on the part of their salesmen. Too often this ill bred familiarity in form letters is the work of professional letter writers whose sole idea of human interest is words that are not to be found in the dictionary.

The form and follow-up letter must have the four cardinal points of attention, interest, desire, and action but these should be seasoned with dignity, refinement, modesty and harmony.

The length of the form-letter is determined, of course, by

its message. If the story can be told in one hundred and twenty-five words, then to use one hundred and thirty words is to use five too many. There need be no fear of the letter being too lengthy, however, if every sentence and every paragraph is virile and clear and straightforward, and is necessary to the story.

The form-letter may be well summed up in what Lord Chesterfield says: "Let your letter be written as accurately as you are able. I mean with regard to language, grammar and stops; for as to the matter of it, the less trouble you give yourself the better it will be. Letters should be easy and natural, and convey to the persons to whom we send them just what we should say to the persons if we were talking with them."

*The Broadside.*—The broadside is distinguished from any other piece of direct-mail matter by its size, for it is usually a large sheet measuring approximately twenty-two by twenty-eight inches, printed on both sides, folded several times and sent through the mail often without being enclosed in an envelope.

Its place can be anywhere in the direct-mail campaign but it is usually used as the first piece or the last: the first so that its bigness will "dominate", and thus attract attention to the product and the direct-mail campaign to follow, and the last so that on it can be illustrated all the features of the campaign, thus driving home in one shot the campaign as a unit.

Care must be exercised in the preparation of the broadside lest because of its bigness it is difficult to read. By way of example, if a single sheet poster, prepared for poster use, be used as a mailing piece it would be necessary to pin it on the wall, and to stand some distance from it before it could be read.

The broadside is particularly suited to a campaign where the product is of such nature that it can be illustrated full size. Unless there is some such definite advantage in the use of the broadside, other forms of direct-mail matter are preferable.

*Booklets.*—The word booklets, as does the word folders, covers a wide range. The advertising booklet may be one of four pages with self cover or one of sixteen pages with separate cover. In its simple form it may be used as an envelope enclosure to go out with form and follow-up letters or it may be one of a series of a direct-mail campaign.

*Envelope Enclosures.*—Many of the pieces that have been mentioned in this chapter might well be used as envelope enclosures: this applies to the blotter, the folder, and the booklet. An envelope enclosure that goes out with a form or follow-up letter and as such is a part of the campaign, should not be confused with an envelope stuffer that is supplied by the advertising department to the mailing-room and is enclosed with each piece of outgoing mail.

The envelope enclosure has a more definite purpose than the stuffer. When it is enclosed with a form letter or follow-up letter, there should be a definite reason for it, else it should not be enclosed, for too many enclosures weaken the appeal of the letter. If the letter describes a product that cannot be illustrated on the letterhead, an envelope enclosure is justified, or if the enclosure is a "localized" one for distribution in some territory and lists names of satisfied users of the product in that territory, it is justified. But to stuff the envelope to its mailing rate capacity with irrelevant enclosures smacks too highly of the cheap mail order house that terms its mailing list the "sucker list".

The envelope stuffer, as differentiated from the enclosure, used to moderation is good advertising, although its use depends largely upon the class of people to whom the mail is going. If by the nature of the business the greatest part of outgoing mail is to large corporations, the stuffer is useless for the reason that the mail is opened by clerks and the stuffer goes with the envelope into the waste basket.

*Novelties.*—This includes a long list of miscellaneous advertising articles among which may be mentioned watch fobs, pencils, pocket books, memorandum books, desk calendars, envelope openers, celluloid novelties, match cases, rulers, paper weights, etc.



The value of these depends largely upon the nature of the novelty, the degree to which it can advertise the product, and its method of distribution.

If the novelty is of such a nature that it can be both a utility and an illustration of the product, and it can be distributed with minimum waste, it becomes good supplementary advertising. By way of illustration, a manufacturer of ball bearings made paper weights of steel balls that had not passed inspection. These were nickel plated, the name of the manufacturer was etched upon the base and they were sent out to a list of individual names. Here the cost was very slight, the novelty one of utility and withal an illustration of the product.

Another manufacturer used to advantage a certain form of loose-leaf memorandum book, placing toward the end of the pages one which served as a postal card, to be sent in as a request for additional filler. In this particular instance, sixty per cent. of the postal cards were returned, proving that the book had been used.

The real advertising value of novelties, however, is to be questioned. In almost every man's top dresser drawer there are numerous cigar cases, memorandum books, match cases, etc., all advertising novelties, each of which cost from twenty-five cents to a dollar. Usually these are passed to the son and heir of the family, or are permitted to accumulate until a periodical house cleaning disposes of them.

#### SERIES OR UNRELATED MAIL PIECES

As there should be a definite plan behind all advertising, a series of direct-mail pieces, all different and yet all bearing relation to each other, will oftentimes fit into the campaign better than unrelated pieces. Again, where a series is used, continuity is established and the pre-determined mailing dates are more easily lived up to for the reason that all mailing pieces of the series are prepared in advance. The hit and miss plan, the attitude of—"we have not sent out a mailing piece for some time, so let's get something out"

—has but little of the strength of the planned series. The goal can best be reached when it is clearly defined and all action is mapped out in advance.

The selling points of the product should be charted, and these points divided among a pre-determined number of direct-mail pieces. As has been stated these pieces need not be similar in physical form, but there should be sufficient uniformity to establish the relation of each to the other and to the series.

This uniformity can be obtained by the same treatment of art work, or the same style of typography, or by illustrating the always-forward action. By way of example: A manufacturer has a product sold through dealers. He wants to send a direct-mail campaign into the territory covered by that dealer and to a list of names furnished by the dealer. This campaign must sell the product and sell it through the dealer. The careful analysis made of all raw materials entering into the product, the exacting care in manufacture, and the thorough system of inspection of parts in process, are important selling points. A series of direct-mail pieces is made up, each different in physical form and yet each, by way of illustration, carrying the product from the laboratories, through all processes of manufacture, to the shipping platform, to the dealer and thence to the consumer. One fact, one selling point would dominate each piece of such a series; yet the entire message would be briefed on each and each would carry the action forward.

#### EACH MAIL PIECE A PART OF THE CAMPAIGN

While keeping everlastingly at it is a good axiom as applied to advertising, there should be a definite campaign, and when the last piece of the campaign is mailed, the campaign as a campaign should be finished. It might be followed by another definite, clearly defined campaign, but straggling pieces should not be tagged on as thought of. Flashes of bright ideas are all right; but these should be filed, clarified and fitted into the proper places. Let it be

repeated again, for fear of misunderstanding: While the direct-mail pieces should each be a part of a series, at the same time each should be able to stand by itself. Each should carry the entire thought of the campaign, but one selling point should dominate.

In the use of follow-up letters particularly is a definite series advisable. In the sales divisions of many factories to-day there are follow-up files that come regularly to the attention of the sales correspondents; just "another letter" is sent out, and the file set ahead thirty days; then the operation is repeated. For a file opened through an inquiry from advertising, there should be a definite number of follow-up letters, and then if no result is accomplished the file should be closed, the name transferred possibly to a general mailing list, and attention directed to live prospects.

The number of direct-mail pieces, the number of follow-up letters to be used, cannot be determined arbitrarily, but should be established rather by the nature of the product and the analysis of the problem. Many manufacturers have used as high as eighteen and twenty letters, and have found that maximum results are obtained on the last letters in the series. It is a question that must be decided by the particular problem to be solved, the particular situation to be dealt with.

*How Often Mailed.*—It is well to send out the first few pieces of a series at shorter intervals. If a series consists of ten pieces it is better to have a lapse of three days between the first and second pieces, a lapse of five days between the second and third, seven days between the third and fourth, etc., than it is to have equal periods between mailings. If a person receive three mailing pieces one week, two the next, one the next, and thereafter one every two weeks for say a month, he will be under the impression that he has received something from that house every few days.

Careful consideration should be given to the day of mailing. The law of averages has established the fact that a

man is less responsive on Monday and Friday than any other days, for on Monday he is consumed with a desire to accomplish a whole lot during the week, while on Friday he is anxious to clear up matters for the week. On Tuesday his desire to accomplish great things is on the wane and on Wednesday he seeks relief from the routine of his job. Therefore, on Wednesday he is more receptive to a direct-mail piece whether it be an advertising broadside or a form letter.

Again, the nature of the man's business should be taken into consideration. A manufacturer sending out a direct-mail campaign into the coal mining territory felt that he was not getting the proper proportion of returns. Upon investigation the discovery was made that the pieces had been addressed to the mines and received on a day when it was the custom for the superintendents to visit the executive offices located in the neighboring cities. A change of mailing day produced better results.

Direct-mail pieces, form letters, should not be mailed so that they will be received on a Monday, a Saturday, or a day following a holiday. By dividing the list into zones this matter can be kept under control and when attention is paid to it more satisfactory results will be obtained than by following a haphazard method.

The direct-mail campaign can be made an important part of the whole advertising campaign. But the same exacting care and attention must be paid to it that is given to the magazine campaign. There should be a definite part of the appropriation for it, and it must occupy a definite place in the campaign. There must be a definite object to be gained by it, a definite reason for every piece sent out. The advertising manager or manufacturer should know why he is doing it, how he is going to do it, when and where he is going to do it, and what he is going to do it with. A haphazard, slipshod method accomplishes but little; if results are, by chance, obtained, no definite principles can be established because there was no definite plan of action.

Every direct-mail piece sent out is a salesman on paper and by it the house is going to be judged. Therefore the pieces should be dignified and orderly, persistent, and yet quiet. Letters should be sent under a two cent stamp, by the same token that a salesman travels in the Pullman rather than sits up all night in a coach.

## CHAPTER XII

### PROSPECTUSES, BULLETINS, CATALOGUES

The prospectus—Three classes of printed literature—The bulletin—  
The catalogue—Loose leaf versus single catalogue—Catalogue  
sizes—The printing.

#### THE PROSPECTUS

*A Dramatized Report.*—In advertising and selling technical products, a prospectus is a summarized or an extended report, treating the product and its application and service in a technical way. It has for its motive the sale of the product, and it is dramatized by an attractive physical appearance, the effective use of illustrations, and the proper recognition of the limits of the reader's span of attention. The sales message and the treatment of it are made to appeal to the individual prospect to whom the prospectus is delivered.

There might be some argument as to the correctness of calling a typewritten document advertising, but the advertising department can be of great assistance in dramatizing a sales document for the engineer. For this reason, and for the reason that the authors have seen high grade prospectuses "bring home the bacon" so often, the prospectus is being discussed here in detail.

A letter may be called a report or a prospectus if it contains some data or recommendations so displayed as to attract special attention. This letter may be placed in an attractive folder. If plenty of data are available, however, it is best to make up a complete prospectus.

*The Binder or Cover.*—The prospectus should be bound in some suitable binder of stiff paper. Unless the proposition is extensive and important it is not wise to use an

expensive binder. If the engineer is out after a contract amounting to half a million, he might well bind his data in a leather binder, provided he had some real information to bind; otherwise the binder would have a negative effect. The most suitable binder is made from heavy paper stock with the name of the company printed on it. Also there should be lettered on the cover the names of the man and the company receiving the prospectus.

*The Size.*—The best size for a prospectus for technical products is the standard,  $8\frac{1}{2} \times 11$  inches. The average engineer likes to use this size paper for all of his data. It is a very convenient size to file and to carry around with him. It is not too large to go into his desk nor too large to lay on top. A larger size may be more impressive but it can not be filed; and as a result, it will be laid away where it can not be found later. Too large a size is likely to be thrown away if there is no place for it. It can not be kept on or in the desk and it can not be carried home to study.

*The Accompanying Letter.*—Attached either to the outside or to the first inside page, should be the letter introducing the prospectus and stating its purpose. This letter should be short, about one page, and should be a real letter worthy of a report upon a very important subject. There should be a few statements that will make the engineer stop and think. The whole scope of the prospectus should be reflected in this letter but in such a way that the engineer can not help turning to the next page. The whole prospectus should be written with the same point in mind.

*Arranging the Material.*—Many men will not wade through a long report; therefore, the prospectus should be made up in such a way as to lead the prospect on to the last page. The prospectus should be presented in chapters, so to speak, so that the reader will get separate impressions of the data presented. If there is a curve to present and it can be described in five or six lines, the curve should be placed on the right hand page and described on the left hand page. Wide margins help the appearance. The written matter should appear on the left hand pages so

that the prospect will easily see curves and photographs on the right as he hastily runs through the prospectus. It is still better to have the curves and photographs project about  $\frac{1}{16}$  of an inch beyond the typed pages so that the reader is sure to see the curves and photographs as he goes through the prospectus in a hurry. If there is a lot of "dry" data to be included, then this should be put up in some kind of an appendix. It will be there if needed and will back up the results stated in the prospectus. The "big boss" can have some assistant dig through these data and report to him concerning the conclusions mentioned in the prospectus.

*When to Use It.*—The prospectus should not be made up until there are available enough facts about the proposition to insure a report that will not be simply "talkative". It is very foolish, of course, to make up a report by using data entirely foreign to the conditions of the work of the prospect under consideration. A study should be made first of these conditions.

It is best not to send in a prospectus until the proposition has been brought to the point where this prospectus can be used as a basis for transacting all future matters concerning the proposition. The prospect can be brought to the point where he mentions many factors concerning the job that the sales engineer is trying to put across. At this point the sales engineer should suggest a report drawing together these factors. If the prospect agrees, this is the time to hit him hard with a prospectus. The prospectus should be followed up by mail or by calls. The sales engineer can refer to his prospectus and in this way it will unconsciously become an authority in the prospect's mind. A prospectus can be used before making a call if there are available data that are new and applicable to the particular industry.

*A Powerful Form of Sales Argument.*—A prospectus is the most direct form of advertising. It goes direct to a prospect, at a time when he is in a frame of mind to accept the story. If properly made, it carries great selling ability in itself. It is sure to be read. It is an extremely powerful



and economical form of sales argument. A prospectus can be used to good advantage whenever the list of prospects is limited and where their plant conditions are known thoroughly. As a prospectus is usually worth more than a call it can be used whenever the business in sight warrants a few calls. Sometimes, special reports are made up for use as prospectuses, and in order to make them worth while plenty of time must be spent on them. The sales engineer can figure, however, that all of the time spent in preparing the prospectus is worth more than that amount of time spent with the prospect and in travelling. Prospectuses are a good means of reducing railroad fares; they conserve time.

I. *Conditions peculiar to the use of the prospectus.*

1. The number of prospects is limited.
2. Each prospect is a comparatively important potential buyer.
3. The sales engineer knows the prospect's conditions thoroughly and the possible economic advantages of his product under such conditions.
4. The sales story is long.
5. The prospect has requested bids on a big equipment or a big supply.
6. The time is right for a complete summation of the sales arguments.

II. *The distinction of form of a prospectus lies in:*

1. Liberal use of illustrations; that is, photographs, mechanical drawings, charts, tables, etc. These dramatize the sales message, which otherwise would be a long, "dry" message.
2. Size.
  - (a) Each sheet has ample space in which to display properly the subject matter of each particular page.
  - (b) Plenty of pages are provided to carry the complete sales story; enough to break it up into "chapters," so as not to strain the prospect's power of attention.
3. The physical appearance and appeal.

It is possible to appeal to the prospects æsthetic sense by carefully typewritten composition, and the careful choice of cover or binder, stationery, and even color.

III. *The value of a prospectus lies in its*

1. Individual appeal to the prospect.
2. Ease of visual perception.

- (a) Data arranged in charts or curves.
- (b) Each thought on its own individual page.
- (c) Complete story quickly compassed.
- 3. Superiority in securing attention.
  - (a) The quantity and quality of the stimulus is furnished by its distinction of display.
  - (b) The prospectus is held over until the condition of the brain and nervous system is in a receptive mood.
  - (c) Attention is sustained throughout the prospectus by the limited "span of attention", and the illustrations used.
- 4. Power to hold and intensify interest through
  - (a) Distinction of form.
  - (b) Sensations feeling the deflecting force of others.
- 5. Strengthening the "Desire and Conviction" elements of a sale by
  - (a) Giving the logical mind an opportunity to produce action by virtue of the sustained interest during the positive and conclusive reasoning.
  - (b) Securing the maximum of the "law of suggestion".
  - (c) Providing plenty of space for the suggestions of the action to be taken by the prospect.
- 6. Cost; less than a sales engineer's call.

### THREE CLASSES OF PRINTED LITERATURE

The advertising department is responsible for the preparation, publication, and distribution of all of the sales literature issued by the company. A general classification of this literature can be made as follows: 1. Sales promotion literature; broadsides, folders, booklets, blotters; in general, the forms that are full of sales argument. 2. Bulletins, and similar classes of literature, which contain thorough engineering or technical discussions of the product in relation to its application in various fields. 3. The forms that concentrate on providing complete detail on the product itself; catalogues, data sheets, price sheets, instruction books, instruction tags, parts catalogues.

### THE BULLETIN

A bulletin concentrates on a discussion by engineers of the application of the product to a particular field, as for

instance the application of electric motors to individual or group drives for machine shops, of electric motors to boring mills, of bucket elevators to concentrating mills. The bulletin should be well illustrated by photographs, charts, curves, tables and should be given an attractive physical appearance by the use of good paper, good typography, good printing. The copy of the bulletin should be edited to make it read clearly and smoothly; it should be in dignified engineering language, without any of the conventional advertising "snap". It is very common in practice to give enough information on the product itself, sizes, weights, strengths, prices, to make it possible for the user in the field for which the bulletin is written to order directly from the bulletin. In this case, the publication is a bulletin plus a catalogue section.

#### THE CATALOGUE

*Lockwood's Eight Points.*—R. Bigelow Lockwood, in *Printers' Ink Monthly*, emphasizes the following, "Things to Remember About a Technical Catalogue":

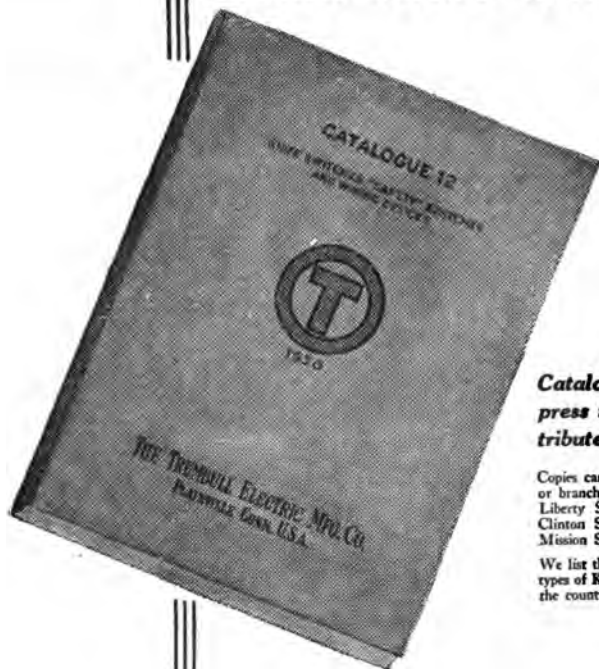
1. The prospective customer should be sold while he is being instructed.
2. The stock must bear much handling and the colors much smudging.
3. The appearance should be in keeping with the product described.
4. Technical men want to see a machine as it looks when set up.
5. The aim of the author should be to get the catalogue on the reference shelf.
6. Catalogue rules may be violated if your experience demands it.
7. A book may be sold if it contains the right kind of information.
8. Correct and plentiful data will bring about the right distribution.

#### LOOSE LEAF VERSUS SINGLE CATALOGUE

There are two armed camps on the question of the loose leaf system of catalogue binding versus the single catalogue of frequent editions.

*Loose Leaf.*—The Heinn Company says in its advertising, "When your catalogue leaves for its first trip over your

# More Water Power Means More Switches



*Catalog 12 just off the press is now being distributed.*

Copies can be obtained from factory or branch offices at New York, 114 Liberty Street; Chicago, 40 South Clinton Street; San Francisco, 395 Mission Street.

We list the most complete line of all types of Knife and Safety Switches in the country.

*"Circle Tool" is guaranteed*

**The Trumbull Electric Mfg. Co.**

Plainville, Conn.

NEW YORK, 114-116 Liberty St.

CHICAGO, 40 South Clinton St.

BOSTON

SAN FRANCISCO, 395 Mission St.

PHILADELPHIA

A well displayed advertisement for the catalogue.

territory you see to it that it goes out strong, full of sales power. Every change in your line in specifications or prices saps the strength of that catalogue, unless you are using the Loose Leaf System. Get Badger Loose Leaf Catalogues on your sales force and you solve this problem by 'changing a page for the sake of the catalogue instead of changing the catalogue for the sake of a page.' It can be issued a section at a time—the sections being timed to reach buyers at the buying period."

S. Sidney Neu, who specialized on catalogue publication and distribution for the Westinghouse Company says:

"The Westinghouse sectional catalogue was replaced by a single catalogue of about 1600 pages. While this is a tremendous job to produce every year, everybody recognizes that it is a vast improvement and worth its extra cost.

"Theoretically, a looseleaf or sectional catalogue is an ideal way to list a large and frequently changing line of products. It is 'always up to date.' In practice it is *never* up to-date. Customers up to ninety per cent. or more make little or no attempt to file the new matter, and even the firm's salesmen who are vitally interested in carrying a thoroughly live and complete catalogue cannot depend on the matter they have with them.

"A single bound catalogue, while it becomes somewhat obsolete toward the end of its period of publication, is even then more up to date than any set of loose leaf catalogues that has been in use for a similar period. Once in so often the catalogue in the hands of the principal customers and the salesmen is thoroughly reliable, whereas the other never is. The period of issuance must depend, of course, on the importance of the changes in the line and the stability of the line. Between editions, changes in the line can be taken care of by sectional catalogues or bulletins, all of these automatically cancelled when the new edition appears."

### CATALOGUE SIZES

There have been under way for some time efforts on the part of various organizations to standardize catalogue sizes.

The National Association of Purchasing Agents has recommended a standard size of  $7\frac{1}{2}$  by  $10\frac{5}{8}$  inches, and a half size  $5\frac{1}{4}$  by  $7\frac{1}{2}$  inches, saddle stitched for convenience in filing.

*Just off the press—*

# A New Book on Milling

**A 412-PAGE BOOK** full of data on all branches of milling, most of which have never before been published. Tells you just what you want to know about the latest practice in—

**Speeds and Feeds**

**Cutter Design**

**Jigs and Fixtures**

**The Best Method for Milling  
a Given Job**

**Power Required to do Milling**

**Size of Cut Each Machine  
Can Take**

**How to Set Up for the Best  
Results**

**Cutter Sharpening**

**Chattering—Its Causes and  
Remedies**

**Use of the Dividing Head—**

and a complete simple discussion of the mathematics of

Spur, Bevel, Mitre, Spiral and Worm Gear Cutting,  
Angular Indexing, Computing Change Gears, etc.

Complete Tables for—

Indexing

Spiral Milling

Cam Milling

Rack Milling

Trigonometric Functions,  
Etc.

**Invaluable to the superintendent, foreman,  
milling machine operator and draftsman.**

**\$1.50 per copy, post prepaid.**

**The Cincinnati  
Milling Machine Co.  
Cincinnati, Ohio**

Date .....

The Cincinnati Milling Machine Co.,  
Cincinnati, Ohio.

Gentlemen:

Send me a copy of your "A Treatise on Milling and Milling Machines"  
post prepaid. Enclosed find \$1.50 in check, money order, cash, stamps.

Name .....

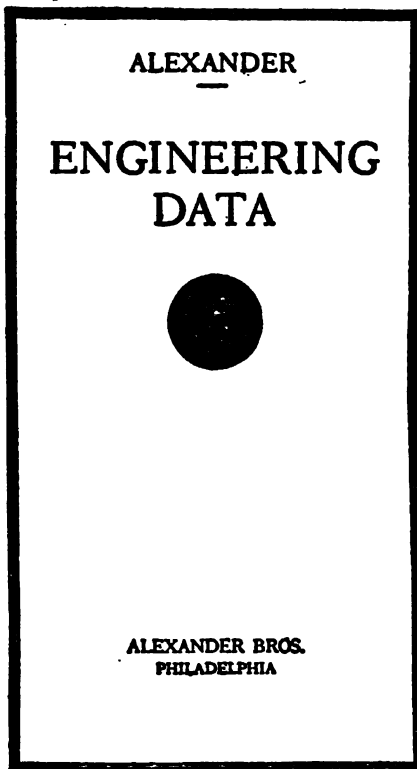
Address .....

A.M. 11-20-14

A good way to "sell" the value of a sales book. Putting a price on an engineering sales book is a good preliminary to giving it away to influential buyers.

The American Society of Mechanical Engineers recommends  $6 \times 9$ , and  $8\frac{1}{2} \times 11$ ; the Technical Publicity Association the same.

The manufacturer may have special reasons for not adopting a standard size for his catalogue, but these reasons should be substantiated by study before an odd size catalogue is put into production.



Front cover, Alexander Brothers' belting data book. Simplicity, dignity.

### THE PRINTING

There are exceptional cases, but in general, it pays to go in for quality in arranging for the printing of a catalogue, or any other printed matter. Cheap printing makes cheap looking stuff—that breathes for a moment in the contemptuous glance of the man who takes it out of the envelope, suffers for a few hours the purgatory of the waste-basket, and is quickly damned into somebody's furnace.

The cost per catalogue is not the total printer's bill for the edition divided by the total number of copies in the edition; rather, it is actually the total printer's bill for the edition divided by the total number of copies that reach the customers' or prospects' reference shelves or files.

At some plants it is the practice to let the purchasing agent negotiate for much of the printed matter. The assumption is made that this work is normal to the purchas-

ing agent's functions of buying materials. This is a false assumption; the advertising manager should have complete control of the purchase of all printing that is to be used for advertising or sales promotion; further, he might with profit to the company, buy all of the printed matter for the organization, letter heads, invoice forms, purchase order forms. There is no reason why all of the company's printed matter should not reflect the character of the institution. And the advertising manager is the man who can express this reflection.

6 ALEXANDER

*Excessive speed in a belt tends to decrease the arc of contact, because the momentum of the belt carries it over the pulley, as shown in Fig. 1. The driving power of the belt is still proportional to the arc of contact of the belt on the pulley, but this is the actual arc of the pulley when in motion and not the arc when at rest.*

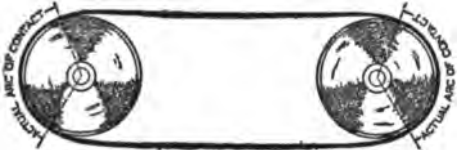


FIG. 1.

*The effect of centrifugal force is noticed only at extremely high speeds.*

**Width, Ply and Speed of Belting for Transmitting a Known Horse Power**

In connection with the power of a drive there are four variables: The horse power, the speed, the width, and the ply of the belt. If any three of these variables are known, the other may be determined as outlined below, but it is absolutely necessary if one of these figures is to be obtained that the other three should be known. The method of finding the horse power when the speed, width, and ply of the belt are known has been outlined.

**To Find the Width of Belt—Other Conditions Being Known**

If the horse power required and the speed of the belt are known, and it has been determined what ply belt be used, the width belt required may be determined from the formula:

FORMULA.—

$$W = \frac{HP \times 33,000}{S \times P}$$

**RULE.**—The width of a belt required is equivalent to the product of the horse power and 33,000 divided by the product of the speed of the belt and the pull P of the belt (50 for single belt, 80 for double belt, etc.).

**Example.**—The width of belt necessary to transmit 128 horse power, when the speed of the belt is 3300 feet per minute and a double belt is used:

$$W = \frac{128 \times 33,000}{3300 \times 80}$$

$$W = 16$$

Therefore, a 16-inch double belt is required to furnish this power

Specimen page, belting data book.  
Excellent display.



## CHAPTER XIII

### HOUSE ORGANS

What the house organ can do—Characteristics common to four types—  
Getting the material—The editor—The salesman's house organ—  
The employee's magazine—The dealer house organ—The consumer  
house organ.

#### WHAT THE HOUSE ORGAN CAN DO

The house organ is a magazine or publication issued by the house for the purpose of building good will or increasing sales.

If it is properly fitted into the advertising campaign, if an analysis of the sales problems shows that a house organ can help to solve these problems and if it is intelligently edited it can be made an important factor in the success of the advertising campaigns.

As in everything else, however, an analysis must be made to determine if a house organ is a necessary part of the campaign. If it is, it must be regarded as such and not as a separate unit produced simply that some one may gratify his personal desire to appear as an editor.

The house organ can build good will and increase sales. It is a potentiality for a certain class of advertising that can be obtained in no other way. Probably one of the most successful house organs, at least in the technical field, is the *Houghton Line*, of the E. F. Houghton Company, Philadelphia. This company states, "*The Houghton Line* . . . . in nine years is credited with having earned over half a million dollars in profits. It has reduced the cost of obtaining inquiries through advertising, ninety per cent. It has reduced the cost of general publicity fifty per cent."

As a builder of good will the house organ can properly lay claim to some notable results. A case came to the attention of the authors not long since that illustrates this point. Through the carelessness of an inexperienced sales manager, a certain company had acquired the undesirable reputation for being arbitrary and magisterial in its dealings with the trade. Advertising in the class journals did not seem to overcome this reputation to any appreciable extent. Finally a house organ, to be written first person singular and over the signature of a fictitious character was decided upon. It was decided further that this house organ should carry no commercial message in its editorial pages, or rather only such messages as could be introduced indirectly; the commercial messages were to be confined to two advertising pages. The editorial policy was to prepare stories that would be helpful, stories inspirational in tone, and withal, of human interest.

The results obtained can best be summed up by reference to a letter that was sent in to the house from one in the trade. The letter was addressed to the attention of the fictitious character. It stated in brief, that the writer had never purchased from the house because of its arbitrary, domineering methods of transacting business. The writer said that for many years he had carried and sold a competing article but, he went on to say, he had read all the numbers of the house organ. And its message of good cheer, its message of good fellowship and kindly feeling had made him thoroughly ashamed of himself; and he closed his letter with a request for prices and discounts. This letter was acknowledged by the author of the house organ, over his pen name, and turned over to the sales division. And in the course of time a substantial order was received.

It is the exceptional case, however, where the house organ can of itself sell goods; that is, actually bring in orders. Its strength lies in its ability to build good will, to keep a customer or user sold on a given product (which is an important factor in any sales campaign) and to pave the way for the salesmen's calls.

### CHARACTERISTICS COMMON TO FOUR TYPES

There are four types of house organs, the salesman's house organ, the employee's house organ, the dealer's house organ, and the consumer's house organ. And as there are factors that are common to all, these common factors will be discussed before the different types.

The size of the house organ may range from the little booklet measuring three by four inches to the standard magazine size eight and a half by eleven and a half inches. It may take on the physical appearance of the magazine or newspaper.

If it is to carry illustrations, naturally it must be of sufficient size to permit of space for these and for text matter. If no illustrations are to be used, a size that will fit easily into the pocket is probably the most desirable.

In physical appearance it should be attractive, as should any advertising piece. It should be set in a type easily read and there should be sufficient margin around the type page lest it present a crowded appearance.

If the house organ is to be a part of the advertising campaign, to accomplish a definite purpose (and unless it has this definite aim, it should never be started), there must be a plan behind it or some semblance of an organization to assure its publication at regular intervals.

### GETTING THE MATERIAL

It is history in house organ work that the first issue is easy to write. All in the organization are interested in the first issue and all have many ideas and suggestions for stories. If the editor be new to the work he is likely to feel that his job is an easy one, but with succeeding issues he finds quickly that the organization has lost interest and that all ideas, all material must come from his brain. Then, unless he has made sufficient preparation, he finds it necessary to prepare an issue of his house organ from "blue sky", a difficult task.

The remedy for this situation is the "idea file" or "morgue", a file of ideas, of "thought starters", of definite stories either well outlined or completely written. The mechanical details of such a filing system need not be discussed here for what would suit one editor probably would be frowned upon by another.

Mention might be made, however, of a very simple and yet very effective device for the house organ editor who is editor only a part of the time. This is the Horn Book File measuring eleven by fourteen inches. It consists of eight heavy bound sheets on each side of which there is a substantial pocket. Leather guide tabs serve to index the contents of each pocket. By allotting a pocket to each issue the house organ editor may have a convenient place in which to slip completed stories, left over matter, outlines, and memorandums.

From this very simple device one may go to the more or less complicated vertical filing systems with numbered envelopes indexed and cross indexed in a card file. As has been said, however, the detail of the filing system is a matter to be decided upon by the editor and to be governed somewhat by the size of his publication and the amount of matter he has to prepare each month.

Experience teaches the importance of a filing system of some kind. It makes the work of the editor easier and makes it possible for him to edit a better paper, to edit it with regularity and with less work. Ideas can be obtained from the daily papers, from magazines, from trade papers, from books, from talks with other members of the organization. With these entered at the time in a loose leaf pocket memorandum book, with the pages filed in some suitable place, the editor is never at a loss to know what to write about, never at a loss for a "thought starter".

To the house organ editor who is really an editor, to the man who would prefer to write a house organ than do anything else in the category of business, there is always a wealth of material that is going to be of interest to his reader, whether that reader be a humble employee in the

basement of the factory, or the company's best customer. For every day, every minute, the greatest idea factory in the world, life, is working for him. Every minute of the day it is turning out stories of laughter and sorrow, happiness and tears, and these are things met with along every path and in every sphere.

### THE EDITOR

Last but not least, and as a matter of fact the most important common factor to all house organs is the editor.

For any house organ, he must be a man of sympathy, a man of vision and imagination, and too, a man who has mixed with and understands people. He need not be a clever writer, for so-called cleverness has ruined many a house organ, but rather a good writer who understands how to write in simple, forceful English. He must be a friendly, human sort of fellow, who has the ability to gain confidence and good will in his written word.

He must have originality, for, while there is nothing new under the sun, there is always a new way, and an original way of giving expression to an old thought. He must have a sense of humor, for humor is the butter to the dry, coarse bread of expression. A sense of humor, however, is not to be confused with the ability to cut barber shop jokes from so called comic weeklies. The editor's sense of humor should be based rather upon a wholesome good natured philosophy of life, for on the great stage of life, the comedian rubs shoulders with the hero and the villain.

The editor should be in absolute authority. He should have the power to reject the president's article on "How I succeeded" and to accept the first literary effort of the office boy, providing of course that the stories are measured by the editor's rule of, *Will this be of interest to my readers?* He should be monarch of his work, held responsible for the success or failure of his publication and ready to stand or fall on that ground and that one only. When, "for policy's sake," he has to run an article because a good customer

wrote it, or the president's wife, or the president's daughter, who is a senior at college, or because it is a poem written by the boss's little seven year old daughter, when he has to run this stuff, his hands are tied securely as if with three inch rope, his work is debased by those who should, of all, be most anxious to see it a success.

If he have associate editors, these should be in charge of certain departments of the paper, and held responsible for their page or pages. If he have contributors, he should review their papers as promptly as possible, and if it be necessary to reject any one, he should write a letter explaining why he has found it necessary to make such rejection.

#### THE SALESMAN'S HOUSE ORGAN

The definite aim of the salesman's house organ is to act as a connecting line between the salesman and the home sales organization and to keep him sold on his work. It is usually the official mouth-piece of the sales manager and while it may be edited by him, assisted by the advertising manager, the mechanical production falls within the scope of the advertising department.

In editorial policy it should be a message of optimism; but the editor should beware lest his optimism fall into the style of "pep talks" and "punch messages". When a salesman is doing his best, when he is catching trains at all hours of the day and night, living, oftentimes, under the most annoying of hotel conditions, he does not want a lot of "pep talks". He has all the "pep" that is necessary. And again much of the "pep" talk that is written is not sincere, and above all things the editor of the salesman's house organ must be one hundred per cent. sincere. Salesmen are just like any other human beings. The average one is doing his best, the average one is ambitious to make a better showing this month than last, and to make a better showing in his territory than another traveller makes in his. He is interested in reports of the sales quotas, interested in what is going on in the home office, interested in

anything that will be of real help to him, but he does not wish to be told constantly to work harder.

Let there be a clear definition, therefore, between "pep talks" and messages that carry with them a real inspiration.

The constant admonition, written in short, jerky sentences, of, "get an hour's earlier start to-morrow morning," "work an hour later to-morrow," "make one more call to-day than yesterday," quickly gets on a salesman's nerve. He soon tires of the constant reiteration to work harder. These messages seldom gain very much for either the house or the sales manager.

A message of real inspiration is, however, a different matter. A message that carries with it a thought that will be of help to the man in his work, a constructive, optimistic thought that will make him think, is what he wants and what accomplishes the most good.

The reader will recall time and time again when he has seen salesmen on the road reading this class of material in such magazines as *The American Magazine*, and *The Saturday Evening Post*. But seldom will he recall an instance where he has seen salesmen reading "pep talks". Then why not pattern after these magazines and edit a salesman's house organ along the same lines?

In addition to such messages, the salesman's house organ or paper should contain news items that will be of interest to him such as, what the different salesmen are doing in their respective territories, what new material there is for sale, any changes made in territory, the sales experiences of different men, news items of the home sales organization, any factory news that pertains to the sales work, a report of the advertising being done, and possibly reproduction of the next month's advertisements.

The physical make-up of the salesman's publication is naturally determined by the number to be distributed. If this number is below one hundred it does not pay to have the publication printed; it should be mimeographed or typewritten. But even in this form, it can be made of great value to the salesman and sales manager. The salesman's

publication, whatever its form, should be published with regularity, either weekly, or semi-monthly, as the nature of the product makes expedient. If sales prices are frequently changing, if material is sold subject to "previous sale", if new forms of the product are constantly being brought out, the salesman's paper should be a weekly or at least, semi-monthly. In some instances, however, where these conditions exist, the salesmen are advised regarding changes by means of bulletins, and the publication is issued only monthly. The authors believe that the salesman's house organ or paper can take the place of all bulletins, except as occasion might demand the publication of an "extra".

### THE EMPLOYEE'S MAGAZINE

A discussion of the employee's magazine may not properly belong in a book on technical advertising. It is touched upon briefly here, however, for the reason that recent years have proved the value of such a publication, and the editing and managing of it are the work of the advertising manager who is not afraid to extend his activities beyond the mere filling of space in publications.

The function of the employee's magazine is to build good will; to promote that intangible asset "shop spirit", *esprit' de corps*—whereby the man in the shop is made to feel an interest in his work beyond the amount contained in his weekly pay envelope.

In the days that have gone this "shop-spirit" was largely a matter of chance. If the shop had for a superintendent a man who, consciously or unconsciously, established this feeling of good will, well and good—that shop prospered and probably knew little of labor trouble. But as the laws and principles of the science of business, of management, have become better known and more firmly established, this haphazard plan of building good will has become obsolete, to be succeeded by definite plans and policies. And that these definite plans have been successful



is proved by the fact that in many plants labor turnover has been reduced to a surprisingly small percentage.

The employee's magazine, properly edited, can be made of great value in this process of establishing an *esprit de corps*, of building good will.

The editorial policy should be, in a general way, the policy governing the newspaper that serves a small community. For the employee's house organ is the newspaper of the plant. And as the small town newspaper to be successful, must be the genuine friend of the people in the community that it serves, so must the employee's paper be the real friend of the men. It must treat of things in a friendly way; it must radiate a spirit of good fellowship, and sound a distinct note of optimism.

It must not be preachy, for preachments are to the employee's paper what "pep talks" are to the salesman's house organ.

The employee's house organ, first, must publish the news of the plant. Its strength, its interests for its readers, lies in the number of personal items that it carries. If John Jones of Department Six goes on a motor cycle trip of two or three days' duration, that trip is good for three stories; first, mention of the fact that he contemplates the trip, second a note to the effect that he has gone, and third a description of the trip. If report is made in one issue that Henry Doe of Department Two is sick, that item should be clipped and pasted to the dummy of the next succeeding issue, in which announcement should be made that Doe is either still sick or else back on the job. When one of the authors was editor of such a paper, he made a practice of keeping a card file record of all employees. This record was kept constantly to date on data supplied by the employment bureau. Entries were made on these cards as mention of the employee was made in the paper. In this way it was possible, over a given period of time, to mention all of the employees, except possibly the always changing, unskilled labor.

In addition to these items of personal mention, reports

# BRIEF NEWS NOTES

## Alex Die and Forge.

A banquet was given, last Saturday night in Hartford in honor of Paul Yonah's birthday. The party was composed mostly of members of the Alex Die and Forge department. A very elaborate program was prepared by Miss Burton, who acted as master of ceremonies. Many musical numbers were enjoyed which included a bass horn solo by Otto Weiss, which was received with much applause, and a few bass solos by Bill Pfeiffer. Bill has a wonderful bass voice and did jingle to "Rocked in the cradle of the deep" with variations. Harry Andrews and Frank Douglass presented a comedy sketch which was received with much laughter. Ed Zeile, who played first base in the band, with the assistance of Charlie Lee, put on a good exhibition of electric welding. Keller, the musician, performed many marches. One of his best was heard a musical one of imitating a fish. Miss and Weiss performed with much skill an act of juggling and acrobatics. Miss at one time was chief tumbler for Harman's "Great Show on Earth." The Alex Stutes Harman band, with John Philip Bagdasarian as leader, played popular airs. The first act at its height the band by the "finger artists" featured. When the first act finished a good selection on his solo. The April Comedy Four, Carl Conroy, Charlie Schuch, Al Kitzpatrick and Ed Gustafson, humorized very well on comedy songs. Bill Pfeiffer and Joe DeGlen presented Paul with a game of dominoes.

Frank Douglass took delight in his exhibition of back and wing dancing. Mayer and LaFollette entertained with an act of juggling. Thompson and McCullip on a musical number in which Thompson rendered a four-bar solo while McCullip accompanied him with a big horn type of instrument. DeWitt Herman, the renowned author, spoke on the life of a very rare bird. "The Australian Sub-house." Charles, the expert, the expert, caused much merriment with his jokes. Everybody enjoyed themselves and we wish Paul happy returns of the day.

## Mc-A-2.

William McClure who was confined to his home two weeks with laminitis is able to be out and visited the shop this morning. I guess home life and absence don't agree with Bill.

Charles Buckle while working on one of his jobs cut his hand. But it was only his left hand so that little incident didn't stop him from eating ice cream. We all hope Buck, and Tom, also Tom were done the Alex M.

Eric Erickson who has been visiting New Haven quite frequently, is leaving his suit after last. Then he expects to make a wild dash. I don't know whether it is to be for a marriage license or what. Don't forget my friends, Eric.

Cervantes Kitchener is a good old soul. He has been working very hard lately at the shop. He has also been talking about some friend named on South Street who he visits occasionally. But he won't tell us when it is coming off. I think she will be a lucky girl.

James Conley, one of our boys, has an awful habit of coming in late. I hope he has some new humping him (sarcastic) in his new suit. He has been neglecting his duty and that's not all. He says, "The train was late this morning. Some good reason we'll say."

Frank Cerverly (the tobacco kid) never been any more today because he is acquainted with the new brand. Poor Frank is saying his married life isn't worth a damn, but he's afraid he can never shake his damn. At last, that is what Tom says.

Location of the house, Bill Potts. Why is the telephone on my lately, Bill?

Aut. Margaret, who knows. Tom says there is no chance for Bill when he is around. Bill doesn't care though as he has someone in Fair Haven.

Tenney, the kid wonder abaker, expects to gain some flesh around the plumbing shop. If hunting will do it, he's right.

Buck says he has won over three pairs of trousers in a month's time of that 12000 job. Not on the loose, either.

## Main Office, Fifth Floor.

Waterbury has sent in another one of his letters to join our New Departure family. Miss Anna Nelson has recently joined our talking department.

Our cheerful little lady of the billing department is all at her home with twins. We most certainly hope to see Miss Merriman with an again very soon.

There seems to be an attraction in William and Mrs. Miller. Miss Lillian says it's a work of pleasure while they.



Most recent Broadway and the Hotel Harold Grace. They joined to their most hands of checking instant prices and fought continuous long enough to allow the photographer to snap them. Grace looks so tough he was getting ready to hear his latest tell him about the new rules for 1920 ball.

The meeting department has increased in force. Miss Foster is assisting in the headquarters of the end.

Miss Eva Morgan of the new department is still unable to be alone. It's the huge mass to see Eva's glorious constitution.

Quite a number of the girls of the Alex have assisted in serving at the "Peanut Butter Banquet," on last Monday evening. We feel sure that everyone got the best of service and that no one called "Wander, wander come and stay on me."

We welcomed a visitor Monday. George Schuch, formerly of the New Departure family but now engaged to work in the General Motors Corporation in New York. He visited old friends—and that's all.

Percilla Chagnon has returned to her duties following a sickness that caused her absence for almost two weeks. Yes, she has returned with her usual smile.

Lawrence Thorpe has returned to his duties following a period of enforced vacation due to sickness. He is surely well and happy.

Harold Conway, is also among the "free" have returned following sickness at home. Harold was recently welcomed as reports of dire calamity had been spread about prior to the time of his return home.

Raymond Hordick has been kept busy during the recent long spacing window,

and allowing someone and fresh air to have free access to this floor. This was taken as a precautionary measure, being one of the means of combating the flu.

Bob Lawson has returned to his New York address following a stay of a few days at the male office at home for several days.

High Reynolds has returned to his desk in the purchasing department after fighting the flu and sickness at home for several days.

Among those in this department who attended the Women's Civic Club Luncheon at the Park Hotel last Friday evening were the Misses Florence Otto, Lila Cook, Anna Brooks, Fannie Garwick, Betty Lane, Madeline Wadley, Madeline Chagnon, Percilla Chagnon and Mrs. Klenke.

Raymond Hordick has been transferred from the receiving department to the purchasing department.

Miss Rose Lynch has secured a position with the purchasing department. Miss Laura Glick has joined the staff as an stenographer to Verne Dutton.

We welcomed, George Hordick is very busy with his book. While spending a recent weekend in Springfield he was requested to give a talk at a school which dinner could be related. George took the dress of the children's legs, placed in hand upon the back, and shaking his feet.

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wood lumber and has showed off in the "Shiny." He intends to go back in the U. S. Navy next spring.

James L. Brown is again with us after two weeks absence with the flu.

Although I pondered on life's problem, My satisfaction just grew worse. I got no money made.

The 2 for 1 filled up my purse.

"Quanda"

Andrew Pater attended a wedding in New Britain and then didn't show up for a wedding. Some wedding. I'll say.

The shining lights of this department are a shining in the corners. When the lantern, turn on the light, all the "buddies" take off their caps and presto, a dozen reflections begin to function.

Why go to Madison every Sunday, Hyde? Don't! Instead hold enough attraction for you!

Marion Shapiro was seen playing the way to work. His fellow workers thought he had come in on someone but closer scrutiny revealed them as dummy alone.

Ball Inspection Room.

M-C-1.

Mary Andrus, says the shortest way to work in the event. Let us in on it Mary and tell us why.

After Francisco spent the week-end in Springfield, there is some attraction there for that girl but there's no telling.

Percilla McNamara has accepted a position in this department.

Eva Larkin spent, Saturday afternoon in Hartford. Alone!

Miss Lillian says she's much alone. We understood you spent one whole Saturday afternoon trying to purchase a pair. Let me tell you something. You would spend more than your time if you only had the luck of getting your suit.

We wonder why the special delivery man comes to Margaret Harlan's house every day. May be she's making the hair grow faster.

Florence Cook is always looking for a book. She has a good line. Oh what a book!

Frank O'Rourke is a nice little "French" boy. If you doubt our word ask Mary Curran. She knows about him.

We wonder why Florence Curran isn't covered by her voice. We understand Margaretine Harding was her usual teacher. Perhaps there is someone who can now understand why the voice was lost.

Mary Curran spent Saturday in New Britain.

Miss Eva LaFollette spent Sunday in Farmville with her friends. You were a big name from home, girl.



The department's reporter if you please, inserted another correction. Here's the one she wrote after that game of telephone tag. I said the man was tired to smile that night. Two, some good game you played that night, Corwin. Now once the N. D. looks on your coverage.

A page from the *New Departure News*, the magazine of the employees of the New Departure Manufacturing Company. The publication is saturated with personal material, the "stuff that gets across".

should be carried in the employee's paper of all meetings of factory associations; the bowling clubs, the savings clubs, the athletic associations, etc. What these clubs are doing should be reported in detail, and, as often as possible, illustrated.

Signed articles by well known men of the town or city in which the plant is located should be featured; for instance, an article by the mayor on "Citizenship"; an article by the president of one of the banks on "The Benefit of Saving"; an article by the president of the board of health, the chairman of the board of education.

The work of editing the paper falls properly to the advertising department and the editor is usually the advertising manager. If, however, he depends upon himself to gather the material, he will find quickly that it is a job complete unto itself. He must have an editorial staff and these should be appointed from the different departments of the factory. It is well for the editor to hold a meeting of this staff at least once a month, at which meeting the latest issue of the paper, the dummy for the next succeeding issue, and general plans for its betterment should be discussed. In this way the editor keeps in contact with his staff and the interest of his staff is maintained.

On the editorial staff there should be a photographer whose duty it should be to attend all meetings of the different clubs and associations, for the employee's paper should be properly illustrated.

Illustrations in the employee's paper should all be home-made. In every organization there are several amateur cartoonists and these men should furnish the drawings.

The frequency of publication of the employee's paper depends upon the size of the organization it serves and the editorial organization behind the paper. If the paper have a circulation of five thousand copies, it might be issued semi-monthly to considerable advantage. But a semi-monthly employee's paper is a big undertaking and it is far better to start the publication as a monthly and then permit ex-

perience to dictate whether or not it shall be changed to a semi-monthly publication, rather than to start as a semi-monthly and change later to a monthly.

Again, labor conditions should be taken into consideration when weighing the frequency of publication. For the employee's paper can accomplish so much good in reducing the labor turn-over that it might be well to issue it semi-monthly or even weekly during certain periods of stress.

Distribution of the employee's paper can be effected by handing copies to the employees as they leave the plant through the various exits, by allotting a certain number to the foreman of each department, or by having the papers handed out at the pay-master's window.

The plan of having the foreman hand the paper to the employees say during the lunch hour has its advantage in that the editor, by a walk through the plant after closing hours, can easily determine whether or not the employees are interested in the paper by the number of copies left around in different departments.

It may be of interest to note that one of the authors followed this plan of distribution in a plant of over six thousand employees and by doing so "discovered" a valuable idea. In a certain department he frequently found many copies of the paper. Upon investigation he discovered that a large percentage of the employees in that department were foreigners unable to read English. The next issue of the paper carried editorials not only in English but in two foreign languages. Never after that did he find a copy of the paper left in that department.

### THE DEALER HOUSE ORGAN

From an editorial viewpoint, probably the most difficult house organs to prepare and to get across are the dealer's and the consumer's house organs.

Conditions with these are different from either the salesman's or the employee's house organ, for competition is greater. The employee, whether he be salesman or factory

hand, will read the publication issued by his house. It is personal with him. It has no competition with other house organs or with other advertising matter, whereas the dealer or consumer may receive many house organs and does receive much direct-by-mail advertising matter.

The first thought behind every article in the dealer's house organ must be, Is this of interest to the dealer?



Front cover and title page of a house organ by the Hyatt Roller Bearing Company distributed to mill supply dealers' salesmen.

**The Transmissionary**  
*Published monthly by the*  
**Hyatt Roller Bearing Co.**  
*at Newark, N. J., and edited*  
*by O. W. Crawshaw.*



THE name contest is over. "Transmissionary" is IT and the perfectly good check for fifty dollars goes to H. W. Strong, of Strong, Carlsle and Hammond, Cleveland.

The judges were Mr. Clay C. Cooper, Editor of Mill Supplies, Chicago; Mr. J. George Frederick, Editor of Advertising and Selling, New York; also one crawshaw, a budding bibliophool of Newark. About two hundred names were submitted. Good, bad and indifferent.

A few like "The Bearing Medium," "The Silent Shaft," "Rotation," "Spiral Hy-tide," "Rollettes," and "Transmission. Topics," deserve honorable mention.

Also one name for dishonorable mention—that of Elizabeth, submitted by Carl Blebler of Milwaukee. And there was one mighty good slogan submitted—"Millions for Equipment but not a Cent for Up-keep," by Mr. C. A. Leisk of Cleveland.

Vol. I

No. 2

Does it offer him a constructive thought that he can apply either to himself or to his business?

Stories of how the president of the company plays golf or works in his garden, poems by the president's daughter, and all pages illustrated by photographs of departments seven and nine or of the president or of his daughter are of no interest to the dealer unless these articles contain some thought that he can apply to his own work.

If the story describing the manufacture of the product, describes too, a process that can be duplicated in a miniature way in the dealer's show window, it is of interest to

him. If the poem by the president's daughter suggests a thought whereby the dealer can increase his profit through increasing his turn-over, he is interested in it.

Stories of how other dealers have increased sales, or reduced expenses, are suitable for the dealer's house organ. The editor of the dealer's house organ should travel among the dealers, among his readers, and search for the material that will be of constructive help.

### THE CONSUMER HOUSE ORGAN

All that has been said in general relative to the editorial policy of the dealer's house organ applies to the consumer's house organ. In the publication there must be stories of how the consumer can profit by the use of the advertised product, new ways in which the advertised product can be used, ways in which other consumers have used the product.

An important function of the consumer's house organ is to keep the consumer sold on the product.

Some days ago, one of the authors, in a talk with John Siddall, Editor of *The American Magazine*, asked, "What makes a story interesting?" And Mr. Siddall replied, "The reader must see himself in the story."

This it seems is the crux of the editorial policy of any house organ; the reader must see himself in the story.

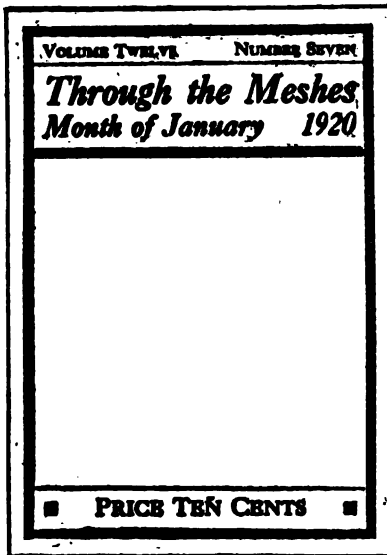
In the advertising trade papers, and in many and various books upon the subject, there has been considerable discussion upon the topic of the best editorial matter for the house organ.

The fundamental purpose of a house organ is to build good will. Except in few instances can it of itself bring in orders. Then what is good will and how can it best be obtained?

Good will is, for the purpose in hand, kindly feeling, a friendly feeling toward a certain product and a certain house. Building good will is establishing an atmosphere around a certain product or a certain house that makes it individual, that makes it different from others in the same field of endeavor.

To quote from a booklet issued by the Dando Company of Philadelphia:

"We often hear the expression, 'I have an affection for such an author, book or magazine.' All things being equal, people will buy from a house they like and the right kind of a house organ can build that liking to a wonderful degree. Lots of men land big business for their houses at their clubs and through social channels, but they do not do it by shouting their names and their wares in the club rooms. Good advertising is just as subtle a thing as good business."



## THROUGH *the* MESHES

Month of January. Nineteen-Twenty

Vol. 12 Copyright 1920 by THE W. S. TYLER COMPANY No. 7

A monthly publication issued for circulation to all within the business range of The W. S. Tyler Company. To others the price is ten cents a number or one dollar per year. No advertising space for sale. If desired it will be sent to your home address.

**T**HERE is too much "fine" writing in the world, and not enough plain, ordinary, common-sense writing.

Also, too much writing is the product of men who sit in towers and in country places, far from the noise and soot and sweat of commerce and industry.

In the days when nobility flourished, so-called fine writing had a function to perform: to entertain men and women of leisure. This class was about the only educated group in a nation. It was the only group that could afford to buy printed matter. The masses were illiterate.

Front cover and title page of the house organ of the W. S. Tyler Company circulated to "all within the business range" of the company.

From the extreme in the "non-business" style of editorial contents one may go to the other extreme where every page is an advertising page. It would seem, however, that, as in all things, the middle course is the best course to steer.

Much depends, however, upon the sales problem to be solved and the ability of the editor as a writer. If the "non-business" type of house organ can be well written, issue after issue, it would seem to be the desirable type, but

as there are few house organ writers in proportion to house organ editors, it is probably well to adhere to the middle course. At all times, however, in the material used, "the reader must be able to see himself"—the material must be life.

The house organ, properly edited, is one of the most efficient and economical of advertising mediums.

It must, however, be a part of the advertising campaign; there must be cause for it. It has been said of Harriet Beecher Stowe, that when her book, *Uncle Tom's Cabin* captured the world, her publishers demanded a new book. And she wrote, *Dred*, a tale of the Dismal Swamp, for which there was but little sale; whereupon some witty paragrapher remarked, "Mrs. Stowe wrote *Uncle Tom's Cabin*, because she had a book to write, but she wrote *Dred* because she had to write a book."

If, in the campaign there is a logical place for a house organ, if a house organ has to be prepared to meet a certain sales problem because nothing else will so well fill the niche, it should be started. And with an editor who is really a writer, it can be made a great factor for good.

It must have a definite mission to perform, a well defined problem to solve. It must be edited with a distinct purpose in mind. And regardless of the type of house organ it is, it must have a human appeal. It must have in it something to make it worth the price in time that it will take to read it.



## CHAPTER XIV

### EDUCATIONAL WORK

Advertising and sales promotion—Technical and trade paper publicity—  
Papers before engineering societies—Education of the designer—  
Educating the student engineer—Moving pictures and lantern  
slides—Exhibitions—Constructive service.

#### ADVERTISING AND SALES PROMOTION

The wide-awake advertising department can exert a powerful influence in advancing the sales by co-operating fully with the sales department in the projection of and carrying on constructive educational work and general publicity. This work can be made like the plowing, the fertilizing, the planting of the seed, the cultivating, that the farmer does.

Advertising in its broad sense covers a great deal more than the page in the trade paper, the technical paper, the magazine, or the newspaper, with its copy and its illustrations. It takes in all forms of publicity. It enters deeply into the "Advance Sales" or "Educational" fields. In these fields, then, the Advertising and Sales Promotion Departments should work together.

Between the time the investigation of a market has been completed and the start of an intensive sales effort, it is usually advisable to do a certain amount of preparatory or advance sales work. Perhaps it is necessary to try out the effectiveness of certain letters or mailing pieces on a small section of the market, in connection with the subsequent direct-by-mail effort which is to be combined with the personal sales work. Perhaps some experiments must be made in the personal sales attack. Very probably certain men have to be put in a favorable frame of mind. Perhaps

certain ideas, such as institutional advertising, or the idea on which the appeal for the product is based, must be sold to the market to create the proper receptive attitude to the sales campaign. This is work in which the advertising and sales promotion effort should be combined.

#### TECHNICAL AND TRADE PAPER PUBLICITY

Like anything else that is of real value, publicity in the technical and trade papers can be achieved only by hard work. The "inertia" of the advertising department that expresses itself in the production of the conventional "write-up", sent broadcast to the magazines, causes one principal negative result, namely, a deplorable waste of paper in the face of present paper shortages. The editors of the high-grade magazines will refuse the "write-up"; the publication of it in the other magazines has too slight an effect on sales to count.

The article that is written for the engineering magazine must meet the test imposed by the editor, Does this article contain new engineering information, or does it present a new idea or a new development bearing on the engineering problems of my readers?

The editors of the technical journals are very glad to receive the co-operation of the manufacturer in developing constructive articles for the magazines. They appreciate that the manufacturer's organization includes certain technical or engineering specialists who are the best informed men and the best qualified to write on the subjects on which they specialize, and in which a great number of readers are bound to be sincerely interested.

When one of the present authors represented the Westinghouse Company with the press, the work was developed and carried on along lines laid down by the manager of the Publicity Department, who had the idea for a long time that "press work" could be handled in a more constructive fashion, with better results both to the magazines and to the manufacturer. Accordingly, frequent discussions

were held with the editors of the various fields that developed a common ground from which the whole work could be projected. It was found that many of the editors were actually hungry for certain information that the company could supply easily because of the great wealth and variety of technical talent in its engineering organization. Series of articles were planned covering the use of electric power and electric lighting in the various engineering fields, and as they had been planned with the co-operation of the editors, of course, they were gladly accepted and published. Practically the only mention of the company's name was made in the title of the engineer who wrote the article and in the illustrations. These articles were just the right kind of constructive, educational publicity, of real value to the manufacturer and welcomed by the editor, who will not see his pages prostituted by "write-ups".

#### PAPERS BEFORE ENGINEERING SOCIETIES

What has been said of the article for the engineering magazine is equally true of the paper that is prepared for presentation before the engineering society. The committee on papers of the society is very jealous of the standards of the material that reaches the editorial columns of its own magazine. These standards can be met, however, by the enlistment by the advertising man, of the interest of the engineers with the organization, an interest that results in the production of engineering theses on their various specialties. These presented as papers before the engineering societies and in their magazines can be counted on as very valuable educational work.

#### EDUCATION OF THE DESIGNER

This is another opportunity all too much neglected by the seller of the technical product, the designer, the man who sits at the drafting board. Plentiful information and much personal attention are supplied to the chief engineer

by the salesman. He assumes, and often rightly, that he cannot afford to spend time with the individuals in a large drafting force.

But often the technical product is one that is to be designed into, or specified with, machinery or apparatus worked out by these designers. The particular product may not be such an outstanding part that the chief engineer will discuss it ordinarily with his designers. But these men, who should be well posted on all improvements, are forced by their lack of contact with the man from outside, to rely on what they can read in their technical papers or dig up on their own initiative. Usually worked pretty hard, they often simply consult former designs and follow the same practice.

The use of the product should be made as easy for them as the steel companies have made their data on their standard structural sections. For it is entirely possible, that, properly informed, these men would design the product into their equipment without other sales effort on the part of the marketer. Those companies who have their Advertising and Promotion Departments prepare and distribute hand books on their product to these men, educating them in the use of their product, frequently will save a great deal of their expensive personal sales effort.

Designers can be reached through advertising and sales promotion efforts. Catalogues, data that will enable selection of the proper size and type of the product, with instructions as to how it can be designed into their equipment, are what they need. It should go *to them* rather than await their specific request.

### EDUCATING THE STUDENT ENGINEER

One very important feature of advance sales work is the education of the student engineer. Technical schools are usually glad to co-operate with the manufacturers of technical products if the co-operation is given in the right way. At present there is altogether too much of a gap

between engineering practice and what is taught in the technical schools.

The young engineer fresh from college has very definite impressions gathered during his course. His ideas are not yet modified by much practical experience and if he experimented with and ran tests on a certain make of apparatus, which some wise manufacturer had placed in the school laboratory, he is very apt to regard that particular make as standard apparatus. Whenever he has to make a selection this make immediately comes into his mind. These impressions usually last a long time. If the apparatus is good, there is no reason why the good impression should not last a lifetime.

Therefore it behooves the marketer of the technical product to educate these young men before their minds are hardened. Exhibits, lectures, technical information regarding the product, and apparatus installed in the laboratories are the mediums for the transmission of this information. Sometimes advertisements in the school year-books and papers can be considered a worth while part of this work.

In all of the above matters there is the necessity of co-operation between advertising and sales promotion. In this work the two are inseparably bound. The "Advance Sales" part of sales promotion is largely advertising in its broad sense and advertising is simply one form of sales work—one tool in the hands of the marketer.

### MOVING PICTURES AND LANTERN SLIDES

Moving pictures of the work at the plant, the production methods, of the courses of the raw materials on their way from their sources to the plant, through their transformation into the finished products, and the courses of the products through the channels of distribution to the consumer can be made of intense educational value to the various organizations involved in the work of production and distribution.

These moving pictures, and also lantern slides, can be placed at the disposal of the sales department and the sales promotion department for wide use in private exhibitions before engineering societies, colleges, leagues, Chambers of Commerce, Rotary Clubs, operating companies, and clubs.

The pictures can be supplemented by lectures of an educational nature, dealing with the products and their various applications in the fields in which they are used. Such pictures and lectures can be made the means of keeping the name and achievements of the manufacturer in the minds of his buying public. Such publicity can be concentrated, an advantage not possessed by many other publicity mediums that are costly.

#### EXHIBITIONS

Particularly in the fields where the technical product is used there are, every year, a number of exhibits of equipment. These are held usually in connection with conventions of the associations or societies covering the particular fields. Members come long distances to these gatherings in order to be posted on improvements in methods and equipment, and, of course, for the social features.

These exhibitions offer exceptional opportunities for the advance sales work. The attendance represents a large part of a given market assembled in one spot, in a receptive state of mind, and usually in a good humor. It is the one periodical time when, even with a decided "buyers' market", the market is chasing the product.

Direct sales are almost always possible, but in essence the exhibits are for advance sales work and educational purposes. The exhibits in the booths can be regarded as life-size advertisements. Their make-up should be studied as an advertising piece is studied. The possible effects of the exhibits and the work done by those in attendance should be studied just as the printed advertisement, the sales letter, and the article in the technical paper are studied.

## CONSTRUCTIVE SERVICE

Concerning educational and service work as a means of advertising, H. O. K. Meister, of the Hyatt Roller Bearing Company's Tractor Division says:

"I believe that the best advertising is the constructive service that an organization may give or lend to the future developments of the industry in which it is directly interested. Take, for example, our contribution to the tractor industry in the form of our dynamometers. The dynamometer, of course, was not gotten out in the form of an advertisement. However, I have heard it said that the best thing that we ever did was to give the tractor industry a dynamometer that would enable the industry accurately to measure the draw-bar horsepower of a tractor. This dynamometer was our admission card to the office of more than one big engineer. It gave us a complete line on what the customer was doing in the way of development work, in that we made the test on the original tractor, the experimental job. If the tractor did not show up very well, often he would ask us to offer suggestions on re-design. From an advertising standpoint we have obtained thousands of dollars worth of publicity through the various dynamometer tests made for individual companies, as well as during the tractor demonstration. This dynamometer did not advertise a technical product, but it did advertise a technical institution in such a way that the manufacturers and engineers had considerable confidence in what we said and did. They took our suggestions seriously and this, of course, helped to sell bearings."

**PART III**  
**TECHNICAL ADVERTISEMENTS**





## CHAPTER XV

### ADVERTISING AMMUNITION

Advertisements must have sales killing power—Suggestions for advertising ammunition—Institutional advertising—Guarantees—News—The dealer—Getting sales substance for advertisements—Standardized product or specialty—A test for sales killing power.

#### ADVERTISEMENTS MUST HAVE SALES KILLING POWER

The value of artillery ammunition is judged by its killing power at the target. A complete round of ammunition must include a projectile that exerts its killing power at the target. The killing power depends upon the substance with which the projectile is loaded.

The selling power of an advertisement depends upon the substance with which the advertisement is loaded. There must be some substance, else the advertisement is an empty shell. Perhaps it is a well-formed shell, shiny, pleasing to the eye, attractive. But without the right substance, the shell or advertisement, is practically worthless; it is a blank.

The substance for the advertisement is the very first thing to secure. The actual preparation of the advertisement must be based on the assumption that nothing will be done to give the advertisement form until there has been secured first the material that will go to make up a vital sales message in the advertisement.

There is one big weakness that exists pretty generally today in the advertisements of technical products. Too many of the advertisements are empty shells. They follow all of the best principles of form, but they lack substance. They are prepared obviously without first having secured the sales substance that goes to give an advertisement sales power.

The man who through experience is really well informed on a subject, or who has taken the trouble to make a thorough study of a subject will hold the interest of a critical audience, regardless of his natural or developed ability as an orator. Conversely, the orator who is not thoroughly informed on his subject will fail before the same audience. One of the authors recently attended a dinner given by a traffic club. The diners were made up largely of experienced business men. The subject of the evening was *Export Shipping*. One of the speakers was a United States Senator. He was a charming man and a forceful speaker. But it was evident that he had nothing really pertinent to say on the subject. Much of his speech was given to reading statistics on our trade with China, which, as he himself announced, had been prepared for him by his secretary. The Senator, of course, did not hold the interest of his audience.

So it is with advertising. The group of prospects to whom you wish to appeal with a technical advertisement constitutes a critical audience. Unless you provide yourself with something vital to say before you create your advertisement, the message you deliver will be empty. Your art in building the message will not provide it with sales power.

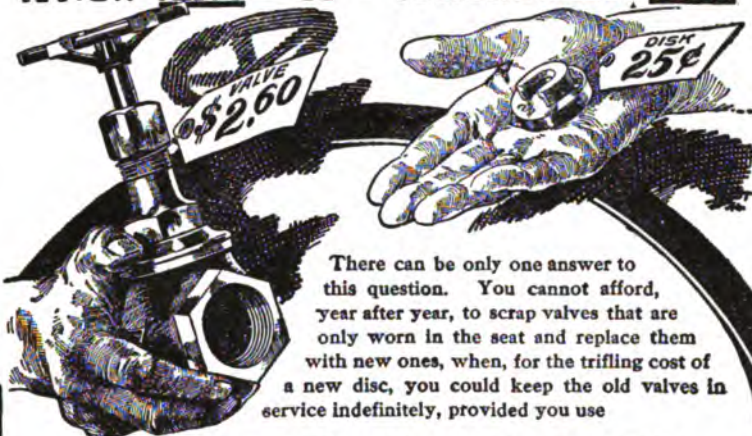
Too many advertisements are written out of the copy-writer's head. The messages are too "inspired". They carry too much of the atmosphere of the desk, too little of the atmosphere of the sales firing line. Although they do say it very well, the writers provide themselves with nothing to say.

One of the greatest weaknesses of advertisements appearing in the technical magazines is that the advertisers make rather broad and sometimes exaggerated claims for their machines or tools and say nothing or show nothing back of these claims that has positive power of conviction or suggestion.

For instance, a machine tool builder leads off with the headline: (actual quotation from the copy) "Boosts

# Which Would You Rather Buy ?

**A New Valve — or — A Renewable Disk**



There can be only one answer to this question. You cannot afford, year after year, to scrap valves that are only worn in the seat and replace them with new ones, when, for the trifling cost of a new disc, you could keep the old valves in service indefinitely, provided you use

## PRATT & CADY Renewable Disc Globe Valves

It requires only a few moments—just long enough to unscrew the bonnet and slip a new asbestos disc onto the end of the spindle—to make a Pratt & Cady Renewable Disc Globe Valve practically as good as new. And that can be done without removing valve from the pipe line.

All parts of a Pratt & Cady Valve are made of a superior grade of metal (no scrap) and accurate workmanship insures minimum wear.

This sturdy durability, together with the Renewable feature, makes every Pratt & Cady Valve a long-time investment.

Write for a copy of our catalog.

### PRATT & CADY CO., Inc.

*Manufacturers of Valves, Feed Water Heaters, Hot Water Generators,  
Hot Water Service Heaters, Power Pumps and Asbestos Packed Cocks*

Boston  
Chicago  
Cleveland  
Detroit  
Hartford



Minneapolis  
New York  
Philadelphia  
Pittsburgh  
San Francisco

*Representatives in All Large Cities*

Excellent appeal. The use of the hands is good but the rest of the display is crude.

production, lowers the cost." Then follows the body of the copy:

"Blank lathes are doing it for some of the largest manufacturing concerns of the country. Besides boosting production you will find that they sustain their accuracy at all times and will handle a great variety of work. They are built for years of rough usage and save a great deal of the operator's time by their many features which cannot be found on similar types."

If you made statements of this kind orally to a prospect for such a machine you would expect that he would ask you to prove some of the statements. Why not prove some of them in your advertisements? The advertisement would be a better advertisement if it presented only one of the many features claimed and proved in some way that this feature actually would save the operator's time. The statement, "They are built for years of rough usage" is a general one and could be made by the manufacturer of any good machine tool.

In contrast with this we have the advertisement appearing on page 324 of the advertising section of *Iron Age*, for January 15, 1920, an advertisement by the Niles-Bement-Pond Company in which they lead off with the head-line, "32 years old and still going strong." They show a photograph of a single-head, Niles planer, in actual operation at the plant of the American Engineering Company, Philadelphia, and make the statement that the planer was installed the year the operator was born. A picture of the operator is shown standing at the planer. A statement is made that the planer was put to work at that time and has been continually on the job ever since. This is a very conclusive proof of the capacity of the machine for long service. It is this sort of definiteness that should be put into advertisements. The real work on this advertisement was done in getting the photograph of the planer and the sales message behind the advertisement. With this ammunition on hand it was a comparatively simple matter to make a good advertisement selling the planers of the Niles-Bement-Pond Company.

A few advertising managers have been handicapped, in

building their advertisements, by a lack of sales ammunition, because their companies felt that it was not wise to give out too much information in a general way, on their products, construction, operating characteristics, and

## The World's Tonnage Record is held by "LONGLIFE"

A GOODRICH "LONGLIFE" Conveyor Belt installed at a Utah copper mine in the Spring of 1914 carried 7,313,400 tons of ore during a period of four years at a cost of less than twenty cents per thousand tons.

Never—to Goodrich's knowledge—has this achievement been approached, let alone equalled. Further comment seems superfluous in the face of such mighty testimony.

Why not dictate a letter to Goodrich asking them to send you their Belting Catalog? Surely it will have an economic message for you.

## Goodrich "Longlife" Conveyor Belts

THE B. F. GOODRICH RUBBER COMPANY  
Akron, Ohio

An advertisement in a mining magazine; correct appeal. Such a service record makes the best advertising ammunition. Excellent display.

service. They felt that too much information might be supplied to competitors. Happily, however, this brake is no longer set so tight. Manufacturers are pretty well agreed now that it is not easy for the advertising manager

to tell the competitors anything that they have not made it their business to know.

### SUGGESTIONS FOR ADVERTISING AMMUNITION

Good advertising ammunition is anything that has positive power of conviction or of suggestion and that will provide an advertisement with effective sales force.

The following are suggestions for good advertising ammunition:

**1. *Price:***

- (a) Saving in dollars and cents on purchase price (first cost).
- (b) Saving in dollars and cents on operating cost per unit of service.
- (c) Saving in dollars and cents on work done.

**2. *Service Records—authenticated:***

- (a) Effect on production.
- (b) Money-saving in dollars and cents.
- (c) Time-saving (definite units of time saved).
- (d) Durability.
- (e) Satisfactory service.

**3. *Photographs:***

- (a) The product in actual service in well-known plants.
- (b) The product in actual service.
- (c) The product performing well under difficult conditions.
- (d) Unusual installations of the product.
- (e) The product.
- (f) Personalities.

**4. *Letters of commendation:***

- (a) Well-known users.
- (b) Users.
- (c) Experts.

**5. *Statements of commendation:***

- (a) Well-known users.
- (b) Users.
- (c) Experts.

**6. *Lists of users:***

- (a) Well-known users.
- (b) Users.

7. *Tests—authenticated:*
  - (a) By well-known users.
  - (b) By users.
  - (c) By neutral engineers.
  - (d) By the manufacturer of the product.
8. *Illustrations:*
  - (a) Mechanical drawings.
    1. Installation of the product.
    2. Construction of the product.
  - (b) Charts, curves.
  - (c) Phantom views.
9. *The institution:*
  - (a) History.
  - (b) Organization.
  - (c) The plant.
  - (d) Home conditions of employees.
  - (e) Plant conditions governing production.
  - (f) Personalities.
  - (g) Long average term of service of employees.
10. *Guarantees:*
  - (a) Cost per unit of service.
  - (b) Units of service.
  - (c) Defects in material and workmanship.
  - (d) Unqualified and indefinite.
11. *News:*
  - (a) Orders placed by well-known plants.
  - (b) Large orders placed.
  - (c) Unusual orders placed.
  - (d) Other Orders placed.
  - (e) Connected with use of product.
  - (f) Connected with manufacture of product.
  - (g) Connected in some other way with product.
12. *Engineering service available:*
  - (a) In installing the product.
  - (b) In assisting to maintain it.
13. *Money-making features of product and manufacturer's proposition (in advertising to dealers):*
  - (a) The prospective sales volume.
  - (b) The percentage of profit.
  - (c) The "turn-over."
  - (d) The manufacturer's advertising.
  - (e) The manufacturer's co-operation available.
  - (f) The quality of the product.



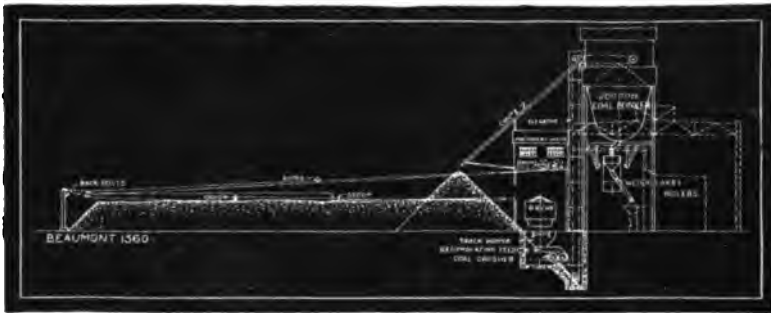
Price in its various forms, that is, the various ways in which the cost of a product can be expressed in dollars and cents, can be used very effectively as advertising ammunition. Price may be a rather dangerous thing to handle but so are many high explosives of terrific killing power.

There is no denying that the dollars and cents appeal to professional buyers is a very powerful one and that the price of a product, expressed either in terms of its purchase price (first cost) or in terms of its operating cost per unit of service has great selling power.

The various features of satisfactory service and of time or money saving records make probably the best selling ammunition. The technical man buys on the basis of securing the product that will give the maximum units of the required service at a minimum cost per unit of service. You can not prove the case on this basis for your product unless you submit evidence. A page array of dollars and cents figures properly set forth and properly authenticated by some kind of third party evidence will accomplish more actually to sell the product than several pages of inspired language heavily laden with high-powered adjectives.

A manufacturer of belting can prove more by showing a photograph of a hard drive, and the record of his belt that made good on it than he can by just talking about the wonderful quality of his belting. This may strike you as a platitude but before you say so too harshly just run through the pages of a few technical magazines and discover how little sales ammunition the belting manufacturers provide themselves with before they build their advertisements.

Any information on the product contained in testimonial letters written by enthusiastic users, is more powerful as selling evidence than anything you can say about the product yourself. If you can get the users of your product to go on record in recommending the service of your product you will find that this is one of the best solutions of your ammunition problem. Such commendation is very much better than any literary heights that you might possibly attain in describing the product yourself.



## With This Equipment Two Men Handle the Coal and Ashes in a 6,000 H. P. Boiler House

How to secure and hold efficient help in the operation of your boiler house, decrease costs, increase production and guard against possible coal shortages, are problems that every factory executive faces. You will find a satisfactory solution in Beaumont Coal and Ash Handling Equipment.

Take for instance the new Johns-Manville boiler house at Manville, N. J. (elevation plan shown above)—

Coal drops from railroad car into a track hopper elevator which discharges either direct into a Beaumont Bunker in the boiler room or into the outdoor Beaumont Drag Scraper storage system, which has a capacity of 15,000 tons. In the boiler room coal from the bunker is fed to the

stokers by means of a Beaumont electric traveling weigh Lorry.

The ashes are handled by a Beaumont automatic skip hoist—the ashes being collected from the stoker hopper by a push car running in a tunnel under the boilers and discharged into an overhead bunker.

Only four men are necessary to operate the entire 6,000 H. P. boiler house with this equipment. Compare this with your own conditions.

For more than 25 years the Beaumont Company has specialized in the design and construction of coal and ash handling equipment of all kinds. One contract covers everything, from the preliminary sketches to the job complete in operating condition. No misunderstandings, no delays, no divided responsibility. The quickest, most economical and surest way to get exactly the boiler-house equipment you need, when you need it.

If you are interested in this Beaumont service write for booklet "Coal & Ash Handling Systems for Boiler Houses."

**Beaumont**  
ONE CONTRACT  
ONE RESPONSIBILITY

Beaumont Company specialists only in boiler houses and does not enter into any other kind of engineering and construction work. It means responsibility, therefore, to state that their equipment is better qualified in design, layout, size and equipment for all one class of work than any other in the country.

**R-H BEAUMONT CO.**  
Coal and Ash Handling Systems for Boiler Houses  
**PHILADELPHIA**

Good illustration, sales story, and display.

## INSTITUTIONAL ADVERTISING

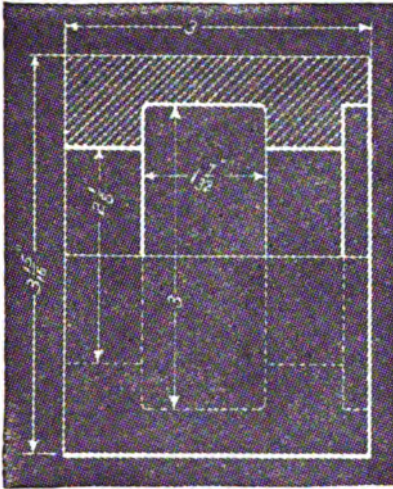
The institution behind the product can provide sales substance for the advertising. Institutional advertising strives to show that the company producing the product advertised is an institution. Institutional advertising shows that the company behind the product has had the time and the strength to grow into an institution for public service. Institutional advertising is that kind of advertising which features the institution or organization behind the product in such a way as to convince the prospect that the product offered must be an excellent value because of the institution or organization behind it. Institutional advertising does not take up the intrinsic merits of the product itself but goes behind the product to the institution that produces it. Institutional advertising goes back of the effect, which is the product, and shows the cause, the institution. It assumes that the effect must be right if the cause is right. It is based on the assumption that the product of a company is the crystallized effort of the organization or institution behind the product. If the organization or institution can be proved to be exceptionally good, it is easy to lead the reader to the logical conclusion that the product also is exceptionally good.

Institutional advertising is particularly applicable in the case of the technical product that is sold to a manufacturer to be sold in turn by him as an integral part of his machine, which is sold to consumers who cannot judge the inherent merits of the technical product either because of their lack of technical intelligence or because the technical product is hidden away in the mechanism of the machine. Examples: The rear axle for a motor truck, the bearings for a tractor, the electric motor for a household appliance.

A number of large manufacturers use institutional advertising designed to sell the institution as a successful growing concern, thereby enhancing the prestige of the product manufactured and the success of the idea upon which the organization has been built. This form of advertising is

designed to reach every person who directly or indirectly might possibly be interested in the article advertised. This form of advertising is used by the manufacturer of the

## An Exceptional Recessing Job



We call this an exceptional recessing job because the width of this recess is  $1\frac{7}{32}$  inch and its depth  $\frac{7}{16}$  inch, and we are proving by this that our machine and recessing tool is exceptionally rigid. It is easy enough to make ordinary narrow recesses, but when you remove as much material as this with a recessing tool in one cut, leaving a good finished surface, we believe you will agree with us that this is really an exceptional job. The kind of material this is made from is machine steel and the time for producing the piece is 20 min. each, and it was made on one of our  $4\frac{1}{4}$  ipch Model A machines.

We hope if you have any such work you are doing in your plant, you will make comparisons with what we accomplish here in finishing this piece all over in the time named.

Our spindle capacities cover all sizes from  $\frac{3}{8}$  inch to 8 inch. We manufacture four models.

Send specifications of your product to us and we can assure you we will give it prompt attention.

"Clevelands" on your work will relieve you of production worry.

**The Cleveland Automatic Machine Co.**  
Cleveland, Ohio, U. S. A.

Definite, conclusive sales detail, well displayed. This was accompanied by a full-page half-tone showing the machine actually doing the work described.

widely distributed product in which a great many types of people have an interest and who might exert an influence when purchases are considered. This advertising creates

consumer acceptance. In the case of the purchase of a motor truck, it is not to be expected that the prospective purchaser will reject the truck on the ground that it is not fitted with a particular axle. But when it is brought to his attention that the axle is part of the truck in question, the truck receives additional favor and the salesman finds less sales resistance.

*The Plant and The Organization.*—A study of the manufacturer's plant and the workmen in it will produce considerable advertising ammunition. A well lighted, well ventilated plant has a positive effect on the character of the work produced in it. The location of the plant in relation to the home conditions available for the employees has a bearing on the quality of the product. A back-bone of well seasoned, long-service employees running through the organization of a factory insures a uniformly high standard of work.

Points of this kind make excellent sales substance for the advertising because not only can they be used logically to prove the case for quality but they offer fine possibilities for weaving into the advertising some threads of human interest appeal.

The history of a company and its products offers possibilities. But historical features must be picked that contain a positive appeal. *The Story of My Life* may be very thrilling to the man who lived it but unless he has the gift of a narrator he will not make it very interesting to others. Historical features must be chosen that will interest the audience, and they must be properly dramatized.

## The Known—Partially Known—and Unknown Fields in Screw Cutting



In focussing a camera lens on a long screw thread one gets three distinct focal ranges.

- 1 The threads *in focus*—sharp—distinct.
- 2 The threads *just out of focus*—hazy—indistinct.
- 3 The threads *completely out of focus*—not showing.

The sharp, distinct threads are representative of present-day or well-known and mastered areas of knowledge of screw threads—of GTD's almost 50 years of definite data—formed thread by thread as it were—keeping pace with requirements.

But we have not rested there—for the hazy—indistinct threads can well represent the *partially known* or approximate future of screw threads, with GTD Threading Specialists analyzing—experimenting—testing for new designs and technique—not ready for general use—but just one move *ahead* of the times—ready for service when conditions are satisfactory.

New inventions are not born overnight, and despite the general public surprise at the sudden appearance of the 12 cylinder automobile or the aeroplane engine—these were the culmination of years of secret designing, experimenting, testing in engineering laboratories before their merits were disclosed.

The regions shown grey—the *unknown*, unexplored, realms of screw cutting—are nevertheless there—and will some day be brought to light—and GTD will be leaders *then*—just as the GTD Corporation and its parent companies *have been* the pioneers since 1871 when the Lightning Die first made screw cutting possible—to be quickly followed by the Lightning Tap—Round Die—Little Giant Die—up to the latest improvements—the "Acorn" Die and "Gun" Tap.

Have your stenographer fill in the coupon or write us for the following threading information.



**GREENFIELD**  
TAP & DIE CORPORATION  
Greenfield, Massachusetts, U.S.A.  
*Canadian Plant: Wells Bros., Co. of Canada, Ltd., Galt, Ontario*

**GTD**  
Corporation,  
Greenfield,  
Mass.

Please send me the following catalogs and booklets:

- Small Tools..... ☐
- Pipe Tools..... ☐
- Gages..... ☐
- "Gun" Tap..... ☐
- "Acorn" Die..... ☐

Name.....  
Firm.....  
Address.....  
M E 604

The imagination that creates an appeal of this kind cannot be praised too highly. The man who created this searched for a new idea and found it. The selling strength of the idea lies in the saturation of the parallel with the use of the company's product.

## GUARANTEES

There are a great many kinds of guarantees. The following classification comprises the more general forms:

1. Indefinite guarantees—the products are said simply to be “Guaranteed”.
2. Guarantees against defects in material and workmanship.
3. Guarantees that the products will deliver a certain number of satisfactory service units.
4. Guarantees covering the cost per unit of service.
5. Time guarantees.
6. Unqualified Guarantees—“Satisfaction or money back”.

As a seller, the manufacturer cannot afford to overlook the selling power of the word “Guarantee”. The word seems to have a great charm for layman buyers, and considerable charm for even professional buyers. They seem to derive a sense of sureness from this word that is sometimes more comforting than their faith in the name of the maker or his trade mark.

The trade-mark of a reputable manufacturer implies to the purchaser that the maker will stand behind the product. But this is indirect and lacks the force of an expressed guarantee. The manufacturer may say that the buyer ought to know better and that the guarantee is worth no more than the good or bad name of the house behind it; but the fact remains that many buyers are charmed by the guarantee. The manufacturer must face this fact and recognize it in his advertising and sales attack. Of course, all reputable manufacturers do stand behind their products and they do make good on their products when they fail. They could not stay in business very long if they did not. But the emphatic point is that the manufacturer can take full advantage of the fact that he stands behind his products and say so in his advertising. The word “Guarantee” has a sales power; the manufacturer can take advantage of this power.

## Pulverized Coal Equipment

Among some of the plants using our Pulverized Coal Equipment for heating Industrial Furnaces and Steam Boilers are the following:



American Iron & Steel Co., Open Hearth, Puddling and Heating Furnaces.  
 American Locomotive Works, Steam Boilers.  
 American Smelting & Refining Co., Reverberatory Furnaces.  
 American Steel & Wire Co., Open Hearth Furnaces.  
 American Steel & Wire Co., Heating Furnaces.  
 Atchison, Topeka & Santa Fe R. R., Locomotives.  
 Atlantic Steel Company, Open Hearth Furnaces.  
 Ash Grove Lime & Portland Cement Co., Steam Boilers.  
 Bethlehem Steel Co., Open Hearth Furnaces.  
 Choctaw Portland Cement Co., Steam Boilers.  
 Inland Steel Co., Heating Furnaces.  
 Lackawanna Steel Co., Calcining and also Flue Dust Nodulizing Kilns.  
 M. K. & T. Railroad, Steam Boilers.  
 Milwaukee Electric Light & Power Co., Steam Boilers.  
 Nichols Copper Company, Smelter.  
 Pacific Coast Coal Co., Steam Boilers.

Pittsburgh Malleable Iron Co., Malleable Furnaces.  
 Siser Forge Company, Heating and Forging Furnaces & Steam Boilers.  
 Scranton Bolt & Nut Co., Heating & Puddling Furnaces.  
 Spanish-American Iron Co., Ore Roasting & Nodulizing Kilns.  
 Stone & Webster Co., Steam Boilers. Union Carbide Company, Lime Kilns.  
 United Verde Ext. Mining Co., Reverberatory Furnaces & Steam Boilers.

Practically all of the Cement Plants in the United States and Canada have installations of Fuller Mills.

Some of the above plants are using Pulverized Coal containing from 10% to 17% of ash for heating their metallurgical furnaces.

Fuller Mills are today pulverizing over 25,000 tons of coal per day for heating various types of furnaces.

The satisfactory performance of our Pulverized Coal Equipment warrants your investigation. We manufacture Coal Crushers, Dryers, Fuller-Lehigh Pulverizer Mills, and Pulverized Coal Feeders. All this equipment is described in our Catalogue No. 71, which we will be pleased to send you.

We also specialize in the manufacture of lining plates for tube mills, pebble mills, ball mills, screen plates, chute liners, and all castings subject to abrasive action. Inquiries covering equipment of this kind will receive our prompt attention.

## FULLER-LEHIGH COMPANY

Main Offices and Works: Fullerton, Pa., U. S. A.

### BRANCH OFFICES:

New York, N. Y., 30 Church St.; Chicago, Ill., McCormick Bldg.; Parsons, Kan., First National Bank Bldg.;  
 San Francisco, Cal., 759 Sheldon Bldg.; Seattle, Wash., 1212 L. C. Smith Bldg.  
 25 Victoria St., Westminster, S. W. L., London, England.  
 Germany, Hamburg, L., "Walthe," GlockengieBervall, 2.

Excellent sales ammunition, poorly presented.



The guarantee he makes and the form in which he puts it, must be tempered, of course, to the market he approaches in such a way as to give him a maximum sales advantage and that he guard himself against loss through unfair advantage that might be taken of some forms of guarantees.

*The Factors that Govern the Form of Guarantees.*—We have said that the manufacturer should temper his guarantee to the market he approaches. This consideration is governed by the following factors:

1. *The product.*

(a) the nature of the product; its construction;

(b) the relation of its operating characteristics to the classes of service for which it is to be sold;

(c) how long the product has been on the market;

(d) whether it is a specialty or a standardized product.

2. *The class of service governing its use.*


The purpose of a guarantee is to assure the purchaser of satisfactory service. Satisfactory service is judged by the length an article remains normal to the purpose for which it is purchased. The longer the normal life of an article, the more liberal the guarantee can read. The chances of a purchaser's presenting for redemption a guaranteed article decrease very rapidly a short time after its purchase. The normal life of an article depends on the class of service governing its use. It is obvious, therefore, that a product may be guaranteed in one form in one field and in some other form in another field.

3. *The component markets (The types of consumers).* Unfortunately, not all people are absolutely fair and honest. A manufacturer of surveying instruments can safely guarantee them unqualifiedly, but how about the man who makes tires for motor trucks?

4. *Competitors' guarantees.* If a manufacturer's competitors are making guarantees that express really nothing more than he is willing to do and actually is doing, then he ought to say as much in his selling and advertising. Not only should he be willing to express in his advertisement what he does constantly as part of his sales policy,

but if he is not so advertising he is neglecting or losing the big advantage that he might gain by actually making such an expression

*Summation from the Manufacturer's View Point.*—The manufacturer should guarantee his goods and he should gain



## AERO BRAND CYANIDE

is made by simply fusing  
**CYANAMID + COMMON SALT**  
in an electric furnace.

Cyanamid (air-nitrogen) is produced at Niagara Falls, by the American Cyanamid Company at the rate of 72,000 tons per annum. It is the cheapest source of fixed nitrogen.

Common salt is abundant and relatively cheap.

The process of converting these two raw materials into Aero Brand Cyanide has been in regular operation since January, 1917

Regular and dependable supplies of "Aero Brand" are assured to buyers at a price per pound of contained cyanide which is actually less than the pre-war price of sodium cyanide.

Thousands of tons of Aero Brand Cyanide have been used in Mexico, Canada and the United States. Booklet E, telling about the interesting results obtained with this unique, money-saving product, will be sent on request.

## AMERICAN CYANAMID COMPANY

611 Fifth Avenue, New York

An advertisement that "says something", and says it well. Good display.

the advantage in his selling and advertising of saying so. The kind of guarantee that he makes should be governed by the previous factors discussed. The form of the guarantee should: (1) insure maximum sales and advertising advantage by its appeal; (2) preclude undue impositions and loss due to excessive claims for redemption.

## NEWS

An element that can be incorporated in making a copy appeal is news. It is possible to give an advertisement sales power by tying it up with an important news development. To develop ammunition for this sort of appeal, it is necessary to keep in touch with current events, newspapers and periodicals, and to make a studious effort to secure news features that can be coupled up in some way as directly as possible—the more directly the better—with the advertisement of the particular product.

## THE DEALER

In advertising to dealers through the trade magazines or through any other means the manufacturer should first provide himself with some sales data bearing on the merits of his product and of his proposition in relation to the dealer's interest in making money. A review of the advertising to dealers shows that the manufacturers seem almost entirely unconscious of the necessity for using such advertising ammunition as a means of really interesting the dealers.

The dealer is interested in the proposition solely from the point of view of buying it and selling it at a full profit. He is interested primarily in making money out of the line. Of course he is interested in the quality of the product because this has a relation to the permanence of his profits. This interest, however, is secondary. His primary interest is concerned with the more purely business characteristics the product presents, and in advertising to the dealer the appeal should be made to this particular interest.

## GETTING SALES SUBSTANCE FOR ADVERTISEMENTS

The advertising man can collect a note-book full of ideas for sales substance by spending a few days calling on pros-

# SHAFTING-COUPPLINGS HANGERS-CLUTCHES PULLEYS-ROPE DRIVES

**Y**OU can't afford to take chances or experiment with your power transmission equipment—its bearing on production costs is far too important. We have demonstrated our qualifications to advise in this matter to the complete satisfaction of many leading manufacturers. Hundreds of shops are equipped throughout with our appliances.

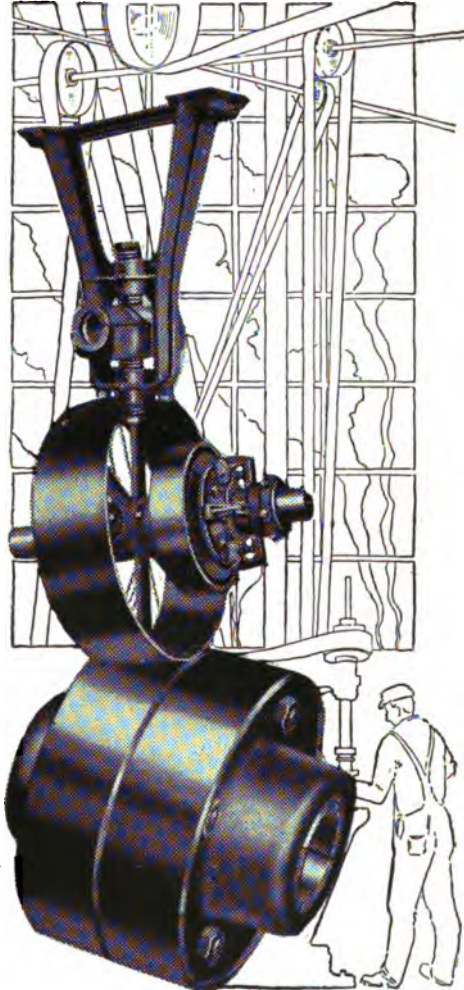
Woods Transmission appliances are efficient on every count—power transmitted, economy, convenience and durability. Of particular interest to machine tool builders are our Universal Giant Compression Coupling and Universal Giant Friction Clutch both of which have distinctive advantages and fill a definite need in modern power transmission practice.

Complete description of these particular items may be secured from our special bulletins and a catalog is also available which describes the whole line.

**T. B. WOOD SONS CO.**  
CHAMBERSBURG, PENNSYLVANIA



**TRANSMISSION  
APPLIANCES**



Good illustration; trite copy.

pects or customers with a sales engineer. He can get ideas by making a careful study of all of the forms of advertising of his competitors. A careful watch of his company's sales correspondence, the salesmen's reports, and the sizes and classes of orders being entered will supply him with a great deal of advertising ammunition. The editorial and advertising pages of the technical or trade magazines that cover the field to which he means to appeal in his advertisements will suggest to him possibilities for powerful sales appeals.

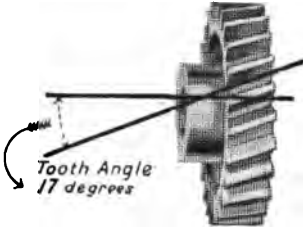
The salesman who is successfully selling a manufacturer's product to a particular industry can give valuable suggestions to the advertising man covering the substance of the sales messages that will prove most effective in writing advertisements to that industry. The salesman not only can make many suggestions for the material that is to provide a basis for the copy, but he also can keep the copywriter straight on the proper point of view to take in advertising to the particular industry.

Some advertising managers collect ammunition by running advertising contests among the sales engineers. The salesmen are requested to write several advertisements selling the application of the company's product to the various industries or fields in which the sale of the product is being promoted. The resultant advertisements are not master-pieces, judged for their value as examples of good advertising technique, but they are mighty valuable as indications of the characteristics of the product and the factors of its service that must be presented in advertising to the respective industries or fields for which the salesmen wrote the advertisements.

#### STANDARDIZED PRODUCT OR SPECIALTY

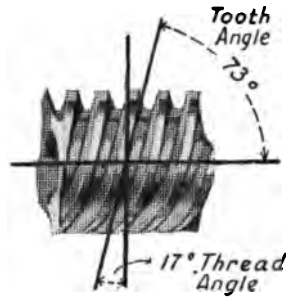
In digging for sales substance the advertising man should recognize that a different point of view must govern the advertising that is produced to sell a specialty from that of the advertising that is produced to stimulate the sales

## Shall we thread - mill or hob?



For Example—  
this spiral gear  
is strictly a  
hobbing job

—but the mate to it  
has only four teeth,  
and its *tooth* angle is  
73 degrees.



Most people would  
call it a worm—in  
which case we must  
speak of the *thread* angle of 17 degrees.

Both gears can be cut on the **LEES-BRADNER** Thread Miller  
—or we can hob them both on the **LEES-BRADNER** Gear  
Generator.

The right way is to hob the first one and thread mill  
the second—both are L-B jobs.

Are you sure that all your gears, threads, splines,  
sprockets and worms are being cut by the most efficient  
method? If not—

ask The **LEES-BRADNER** Co.  
Cleveland, Ohio

of a standardized product against the competition of a lot of manufacturers making a product of practically the same characteristics. In selling a mechanical specialty it is, of course, obvious that it is absolutely necessary to sell the service of the product; that is, to sell what the product will actually accomplish in operation. The inherent features of the product itself are not of prime importance. On the other hand, in advertising a standardized product, it is important to dwell on the characteristics of the con-

## AMERICAN BRIDGE COMPANY

HUDSON TERMINAL-30 CHURCH STREET, NEW YORK

*Manufacturers of Steel Structures of all classes  
particularly BRIDGES AND BUILDINGS*



Ore-Screening Plant and Coning  
Pocket for the Buffalo, Susquehanna Mine, Rogers Brown Iron Company, Hibbing, Minn.

SALES OFFICES

<p>NEW YORK, N. Y., 20 Church Street</p> <p>Philadelphia, Pa., Wilson Building</p> <p>Boston, Mass., John Hancock Bldg.</p> <p>Baltimore, Md., Continental Trust Bldg.</p> <p>PITTSBURGH, Pa., Frick Building</p> <p>Rochester, N. Y., Peoples Block</p> <p>Buffalo, N. Y., Marine National Bank</p> <p>Cincinnati, Ohio, Union Trust Building</p> <p>Atlanta, Ga., Cassell Building</p> <p>Cleveland, Ohio, Rockefeller Building</p> <p>Detroit, Mich., Beecher Ave. &amp; M. C. R. R.</p>	<p>CHICAGO, ILL., 298 South La Salle St.</p> <p>St. Louis, Mo., Third Nat'l Bank Bldg.</p> <p>Denver, Colo., First Nat'l Bank Building</p> <p>Salt Lake City, Utah, Walker Bank Bldg.</p> <p>Duluth, Minn., Walvin Building</p> <p>Minneapolis, Minn., Tishler &amp; Ziegler Bldg.</p>
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Pacific Coast Representatives:


<p>U. S. Steel Products Co. Pacific Coast Dept.</p> <p>SAN FRANCISCO, CAL., Kaiser Building</p> <p>Portland, Ore., Selig Building</p> <p>Seattle, Wash., 414 Ave. So. Conoco St.</p>	<p>Export Representatives:</p> <p>United States Steel Products Co., 30 Church St., N. Y.</p>
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The American Bridge Company has a lot of big stories of its work and organization that could illuminate its advertising space.

struction of the article itself and to show the relation of these characteristics to good value.

Some products must be sold and advertised in both these ways. Take the case of electric industrial trucks. The manufacturer must first sell the power truck as a means of economical transportation, because a great proportion of the prospects to whom he appeals in his advertising are not yet users of any kind of a power truck. Then he must sell these prospects the particular truck he makes, because there are several manufacturers in the field with electric





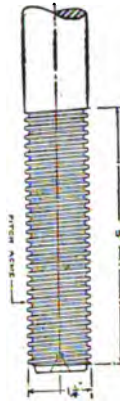
**MAN** power is one of the most costly and uncertain commodities in the manufacturing field. Replace it by the use of Dow Gravity Conveyors and put the savings in the bank. Dow Conveyors have "harnessed" the force of gravity in such a way that you can now move your products—whatever they are—from one place to another at no cost. The tremendous saving is obvious. Send for particulars. Dow Wire and Iron Works, Incorporated, Louisville, Ky.

**DOW**  
LOUISVILLE

**GRAVITY CONVEYORS**

Actual Jobs—Actual Time—Actual Proof  
of the  
**GREAT PRODUCTION  
POSSIBILITIES**  
of  
**Smalley-General  
Thread Millers**

**No. 23**  
**OF A SERIES**



**Thirty-  
Three  
Minutes  
Saved**

**Note:** This job would be supported at outer end by a tail-stock.

While this particular job may not be directly applicable to your business it shows the possibilities of thread milling if you cut threads in quantity. Smalley-General Thread Millers reduce costs, increase output and insure accurate work. Send blueprints and samples of work for Guaranteed Production Estimate of your particular Thread Milling operations.

Smalley-General Thread Millers are sold only upon approval of our Engineering Department. A guaranteed production estimate will be furnished with each machine. In the event a machine should not perform and produce according to our guarantee, the purchaser will have the unquestioned right to cancel the sale.

**MATERIAL,**  
Ground Shafting  
**LATHE TIME,**  
25 minutes, approx.  
**THREAD MILLER  
TIME,**  
3 minutes,  
Door to Door

**Smalley-General Company, Inc.**  
*Machinery Builders*  
Trumbull and Water Streets, Bay City, Mich.

Far-fetched illustration and copy contrasted with common sense illustration and copy that sell the product.



industrial trucks, and he must win out finally against their competition. There are, therefore, two phases to his advertising problem, and his advertising man must dig up sales ammunition that will be effective in accomplishing both of these objects.

### A TEST FOR SALES KILLING POWER

A good test for the amount and power of sales substance in your advertising is to substitute the name of your competitor in the several advertisements of a series. If this does not establish any glaring inconsistencies, if you know that the advertisements would ring just about as true if he used them, if he could put his name at the bottom of your copy without being untruthful, then you might better throw the series into the wastebasket. Pack your bag and get out into a sales territory for a few days. Get some live facts. Get some photographs. Get some advertising ammunition that has sales killing power.

## CHAPTER XVI

### TECHNICAL ADVERTISING DISPLAY

Three purposes of display—Display practice—Illustrations—Copy first or illustration—Kinds of illustrations—Accuracy in all forms—Borders—Arrangement—Simplicity—Type—Distinction.

#### THREE PURPOSES OF DISPLAY

Display includes the elements of the advertisement that appeal to the senses; color, illustration, ornament, type, form, texture. The advertiser can control only the first five in the case of the advertisement he prepares for the magazines; but he can control the texture of a direct mail piece, and make it pleasing to the touch or feeling, as well as to the eye.

Display serves three purposes: To attract attention, to intensify the sales point, and to suggest certain qualities of the product or the company. Unless it serves a useful purpose, unless it causes a favorable reaction as the sensation is translated to the intellect of the engineer or critical buyer, the display is not true art.

#### DISPLAY PRACTICE

A review of the advertisements in the technical magazines shows that although a few advertisers express themselves with too much incoherent art work, ornaments, decorations, borders, the display is, in general, uniformly good. Technical men in general are inclined to express themselves in simple terms, and the technical advertisers seem to content themselves generally with showing a good, clear photograph of the product or an installation of the product, dramatized perhaps, by showing the workman controlling



**40% More Power from your Present Plant and Stack by Hammelizing Your Boilers.**

Have you reached the limit of your stack capacity? In periods of over-load does your boiler equipment refuse to respond to necessary demands?

You can increase the capacity of your present stack and plant at least 40% by Hammelizing your boilers.

In addition to this increased capacity the Hammel Oil Burning System will enable you to use cheaper fuel, the cheapest fuel oil obtainable operating perfectly with Hammel Burners. It will cut out the expense of coal passing and ash handling, make possible continuous operation of boilers at high overloads; no cleaning of fires; eliminate cost of fuel used in banking fires; make possible the quick bringing of a dead boiler to full pressure.

Thousands of Hammelized plants have been accomplishing these results every day for years.

**Hammel Oil Burning Equipment Co.**  
 185 Devonshire Street, Boston, Mass.

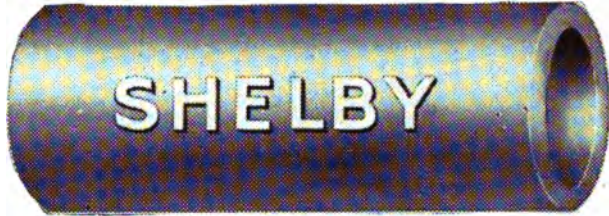
Providence New York Philadelphia  
 Los Angeles, Cal. Jacksonville, Fla. New Orleans, La.  
 Portland, Me. Pittsburgh, Pa.

110-6

# Hammel

***OIL BURNING SYSTEM***

Excellent appeal and display.



## THE RECOGNIZED STANDARD OF SEAMLESS STEEL TUBING

**R**EPRESENTING the highest standards of accuracy in diameter, gauge and wall thickness, and being singularly uniform in chemical and physical properties, "SHELBY" Seamless Steel Tubing meets practically every seamless steel tubular requirement.

¶ Regularly made in a wide variety of shapes and dimensions, and in a number of different anneals and alloys, by an organization with fifty years of experience in the manufacture of wrought tubular products.

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*Ask for Booklet No. 103—"SHELBY"  
Seamless Mechanical Tubing*

### NATIONAL TUBE COMPANY, PITTSBURGH, PA.

General Sales Offices: Frick Building

DISTRICT SALES OFFICES—

Atlanta Boston Chicago Denver Detroit New Orleans New York Salt Lake City Philadelphia Pittsburgh St. Louis St. Paul  
PACIFIC COAST REPRESENTATIVES: U. S. Steel Products Co. San Francisco Los Angeles Portland Seattle  
EXPORT REPRESENTATIVES: U. S. Steel Products Co. New York City

An effective method of driving in an association of the name with the product.  
The display could have been improved by smaller type for the head line.

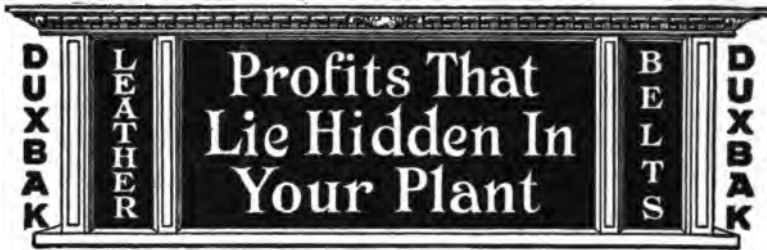
its operation. This directness and simplicity are expressions of true art.

On the other hand, the type display is uniformly poor. The distribution of the copy, the arrangement of the elements of the advertisement, the use of white space are not up to the standards of the illustrations and copy.

### ILLUSTRATIONS

Illustrations or pictures are a universal language. We may not understand the French language, but when we pick up a copy of *La Vie Parisienne* we are able to grasp the idea of a story or a joke because of the pictures. The true function of the picture in the technical advertisement is to tell the sales story or to supplement it, the more directly the better. Again, the illustration serves to attract attention to the advertisement; but care must be taken that this attention does not distract the reader from the sales story. Thus, as an extreme in attracting attention one might use a photograph of the Mack Sennett bathing girls as an attention attracter for an advertisement on machine tools. The reader would see the advertisement and his attention would be attracted by the space. But the chances are that he would remember the bathing girls and nothing else. Further, he would not take a serious view of the sales message. It is well to use originality in illustrations but these must not distract the reader.

An advertisement for oil in one of the popular magazines, advertising oil for motor cars and motor trucks used as an illustration a large picture of a very large generator. This picture undoubtedly attracted attention, but it had very little connection with helping the reader to visualize the possibilities of economy in the use of that particular oil for his truck. An illustration should accomplish not only the attraction of attention to the advertisement, but it should also serve the purpose of intensifying the point that is carried in the sales message.



## We offer the MANUFACTURER our Engineering services for:

**INSTALLATION:** This department is composed of Belt-Engineers whose life has been devoted to the solution of intricate problems in varied industries throughout the world, they will solve your problems in the best possible manner to obtain the greatest production by efficient transmission of power.

**UPKEEP:** You expect the highest efficiency and hope to keep it there. Our experts are fully versed to cope with your belt troubles and will visit any factory using our belts to offer suggestions as to belt upkeep, etc. The value of such service is hard to estimate, in any event it will mean to you that your plant is "belt-right."

**DELIVERIES:** The selling of Schieren Belts is in the hands of salesmen located at important distributive points where ample supplies insure prompt deliveries.

Atlanta, Ga.  
Boston, Mass.  
Chicago, Ill.  
Cleveland, O.

Dallas, Tex.  
Denver, Col.  
Detroit, Mich.  
Kansas City, Mo.

Memphis, Tenn.  
Milwaukee, Wis.  
Philadelphia, Pa.  
Pittsburgh, Pa.

Salt Lake City, U.  
San Francisco, Cal.  
Seattle, Wash.  
St. Louis, Mo.

*Chas. A. Schieren Company*  
ESTABLISHED 1868

25 FERRY STREET, NEW YORK, N. Y., U. S. A.

Greater opportunities are facing the American Manufacturer than ever before, but competition will be of the keenest type. Conditions can be bettered only by increasing production. Now is the time to harness your power and to harness it right. We offer you a

**tried and trained organization.**

Confusion in ideas and display. Too many elements are emphasized.

*Cheap Versus High Grade Art Work.*—When the advertiser in the technical or trade magazines pays only one hundred dollars for a page, he does not feel that he is justified in any great expenditure of money for the preparation of the advertisement. He is inclined to the belief that an inexpensive illustration will answer every purpose. This illogical conclusion leads him to pay twenty or twenty five dollars for a poor illustration, whereas a more expensive

## A Word of Caution

In the enthusiasm of the present Revival of Waterpower, a word of caution may not be out of place.

The fixed investment per kilowatt of capacity for water-power development is inherently large, and unless the project is effectively handled it may even outweigh the natural advantages of low operating cost.

In view of this fact, it is sound business policy to utilize from the inception of a project the experience and ability of Engineers of recognized standing in this field.

Let us protect your investment.

**JOHN F. VAUGHAN ENGINEERS**

185 Devonshire Street, Boston, Mass.

Good appeal, well written and displayed; dignified and restrained. Such treatment gives power to a small space.

one would permit him to obtain from his page the maximum benefit.

Cheap art work tends to cheapen not only the advertisement but the product and the house in the minds of prospective purchasers. And cheap art work is not necessary for the reason that if the advertisement is properly designed and if the whole campaign is kept in mind the illustrations can be so arranged that they may be used for both trade or technical paper advertisements and direct mail pieces. A few weeks ago it was the privilege of one of the authors to look over illustrations designed for a technical product

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## Mining and Metallurgy,

Formerly the Bulletin of the American Institute of Mining and Metallurgical Engineers, the official publication of the Institute, is published monthly and averages 100 pages each issue of the latest, most human technical matter published.

It contains the first publication of the professional and technical papers of the Institute, notices and reports of meetings, timely reports of the activities of Engineers in general, especially in connection with governmental work, accessions of books to the Library, and other current news and technical material of interest in connection with mining and metallurgical operations.

The circulation of each issue of Mining and Metallurgy averages 9000 copies, including the entire membership of the Institute. This distribution may be justly regarded as a preferred list of the leading Mining Engineers; Mine Managers; Superintendents; Managers of ore and coal dressing mills, and of smelting and refining plants; Operating Executives of steel, copper, and other metal plants; Metallurgists; Mining Geologists; and others prominently identified with the entire range of mining and the refining of all varieties of mine products.

Mining and Metallurgy, aside from its position as the official organ of the Institute, has a special field of service in that it is the only periodical in America which covers all phases of mining activities—metals, both ferrous and non-ferrous; coal; non-metallic minerals, etc. This, combined with the distinctive character of its circulation and the purchasing power of its readers makes this magazine an exceptionally effective medium in which to advertise mining and metallurgical equipment and supplies.

**American Institute of Mining and Metallurgical Engineers**  
**29-33 West 39th Street, New York City, N. Y.**

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Good, well-arranged copy.





## What are we going to do about the electric railways?

**T**HERE'S one habit that is common to all McGraw-Hill publications—and the men who make them go. They make it their business to know the needs of their respective industries, and having learned those needs, they get out and hustle to satisfy them.

*Electric Railway Journal*, for example, has consistently championed the just demands of the field it serves. It has upheld the electric railway as an indispensable factor in our transportation system. It has foreseen the shrinking of the five-cent piece and advocated every fare increase which has been shown to be square.

The leadership in electric railway thought, which is frankly acknowledged, has been maintained regardless of cost.

Standing squarely for all that is permanently constructive in its industry, the *Electric Railway Journal* has earned the approval of its field, which is indicated by the fact that it is read by the executives who control 96 per cent of all new and 99 per cent of all existing mileage in this country—by actual count.

The electric railways must go forward. Their development is a part of the development of the nation. In order to progress the electric railways must have sympathy and cooperation, and the sort of sympathetic support they need must well come from representative engineers.

We urge each of the 165,000 engineers who have a common bond in the eleven McGraw-Hill publications to consider the real interests of the railways in his neighborhood, and to bring his influence to bear on the proper solution of their problems.


## The McGraw-Hill Publications

Years  
Old Age  
American Magazine  
Scientific World  
Scientific Monthly  
Journal of Electricity  
Electric Railway Journal  
Engineering News-Record  
Engineering International

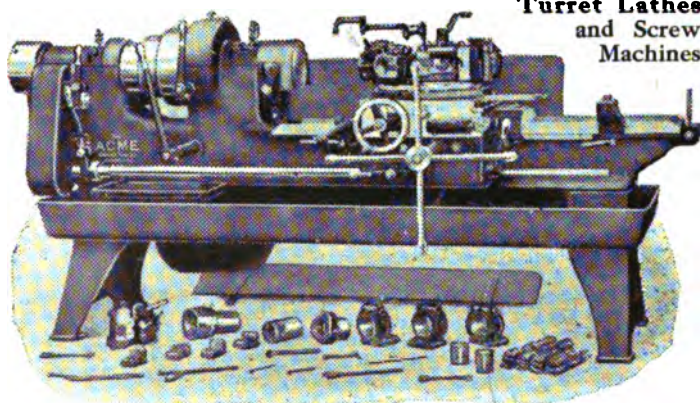
McGraw-Hill Co., Inc.  
Publishers of 12th Street  
New York

Specialized Engineering  
Engineering & Mining Journal

Excellent display and copy.



**BEFORE YOU  
SURRENDER  
TO THE APPARENTLY  
INEVITABLE  
LET US GIVE THAT TROUBLESOME JOB THE  
ONCE~OVER  
AND FURNISH YOU WITH EQUIPMENT THAT'LL  
DO THE TRICK.**

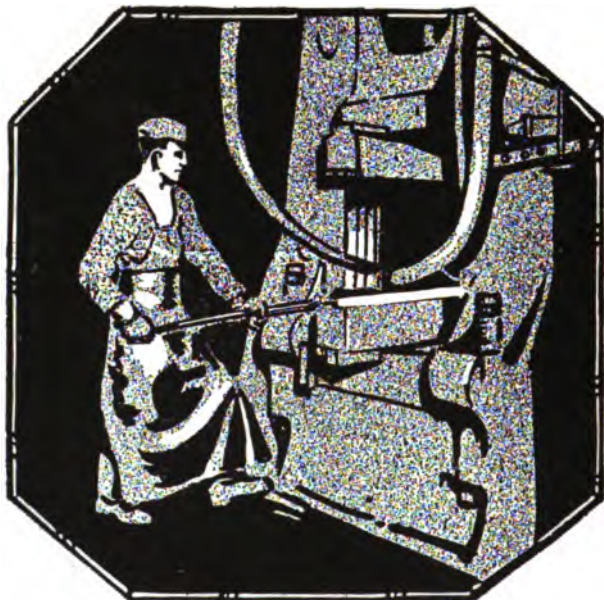


**Cincinnati Acme  
Turret Lathes  
and Screw  
Machines**

**The Acme Machine Tool Co.,** Cincinnati  
Ohio

"Art work, gone wrong".

# FORGING BILLETS



## SPECIAL ALLOY STEEL

CHROME, NICKEL, CHROME VANADIUM  
CHROME NICKEL AND SPECIAL STEELS  
FOR ALL PURPOSES

SHIPMENTS FROM STOCK - WRITE  
FOR MONTHLY STOCK LIST

### ANDREWS STEEL CO

800 HICKORY BLVD. CHICAGO

NEWPORT, KY.

SECURITY BLDG. ST. LOUIS

Too much "art".

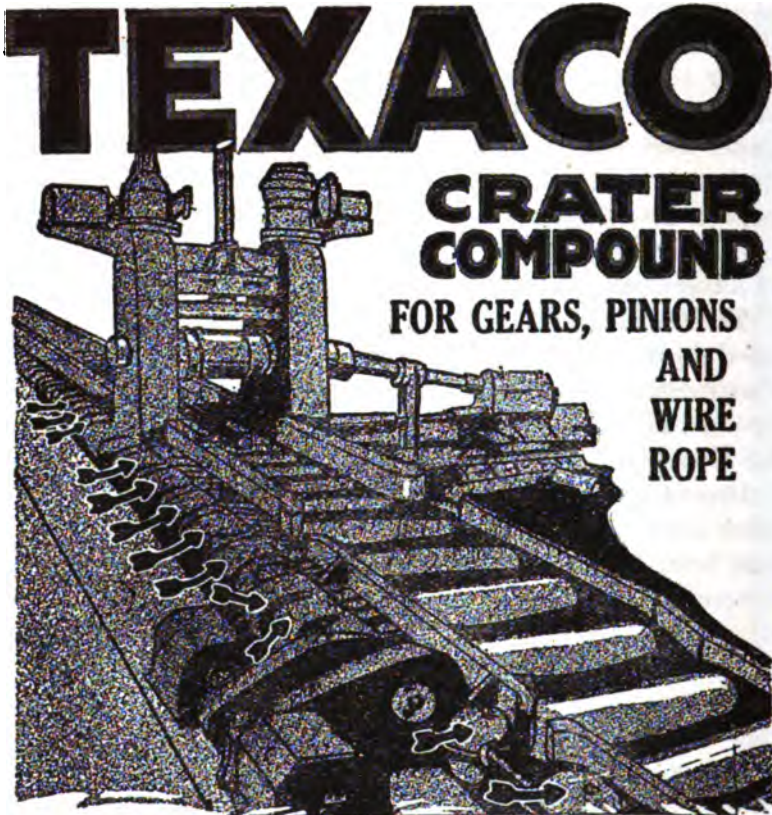
campaign. These illustrations had been arranged by W. Livingston Larned, a leading authority upon advertising art. These were expensive illustrations, splendid examples of advertising art, and yet all had been so designed that each illustration seen served a definite purpose in a technical paper advertisement and for two direct-mail pieces. The cost of these would have been prohibitive for technical paper work only; but distributed over the entire campaign, designed so that they could be used many times, they proved less expensive than cheap illustrations used only once; and, of course, they added quality to every piece of advertising in which they appeared.

*The Product in Working Clothes.*—There has been developed during the last few years a new style of treatment for illustrations of technical products, the style of showing the product in its working clothes. This style adds a splendid advantage to the telling of the sales story.

Recently, a manufacturer of an anti-friction bearing used as an illustration, a photograph of the bearing as it had been taken from the journal box. The bearing was covered with oil and the picture showed oil dripping from it. It made a striking illustration, and at the same time illustrated the text of the advertisement, which was to the effect that the construction of the bearing insured a free flow of oil to all parts.

The Goodyear Company has illustrated its heavy truck tires several times by means of photographs of tires that have been run many thousands of miles. They also have illustrated the traction obtained by their tire, by picturing a truck wheel well down in the mud and yet the impression of the shoe showing clearly and distinctly on the mud.

Advertisers of technical products should bear in mind that the audience for their advertisements is made up for the most part of engineers who have been "through the mill" and therefore are familiar with the appearance of mechanical appliances in actual use. And engineers like to see them presented in that way.



# TEXACO

## CRATER COMPOUND

FOR GEARS, PINIONS  
AND  
WIRE  
ROPE

**PROLONG** the life and increase the efficiency of your rolling mill drives with this great lubricant. This lubricant reduces pressure, heat, flying dust—saves metal surfaces from wear and corrosion. Ask us to give you examples of its success in steel mills throughout the country.

### THE TEXAS COMPANY

Dept. T., 17 Battery Pl., New York City.

New York

Chicago


Offices in Principal Cities

Houston



A photograph of a mill would be more effective and less expensive.





# EDGAR ALLEN

**K-9 Vanadium  
OIL  
HARDENING  
TOOL STEEL**

*for threading  
taps & dies*

**EDGAR ALLEN STEEL CO., INC.**  
**SHEFFIELD ENGLAND**  
**CHICAGO-NEW YORK**

Ineffective, confusing art work.

# Choose

*Rivet or Spot Weld*



**The Federal Spot Welder**

Spot welding of sheet metal under  $\frac{1}{8}$  in. is superior to riveting, both as to speed and cost. You get the effect of rivets with 50% more strength.

With a "FEDERAL" Spot Welder you eliminate laying out, punching and fitting to bring the holes "fair," and it's all done in  $\frac{1}{4}$  to  $\frac{1}{10}$  of the time.

Go over these points again.  
 "FEDERAL" Spot Welding vs Riveting?  
 Spot Welding of course! How does it show?

**The Federal Machine & Welder Co.**  
 Warren, Ohio, U. S. A.

Offices at:

Boston, U.S. 100 Chicago, Ill. 100 Cleveland, Ohio 100 Detroit, Mich. 100 Kansas City, Mo. 100 New York, N.Y. 100 Philadelphia, Pa. 100 St. Louis, Mo. 100 Toledo, Ohio 100	Cincinnati, Ohio 100 Columbus, Ohio 100 Dayton, Ohio 100 Indianapolis, Ind. 100 Pittsburgh, Pa. 100 St. Paul, Minn. 100 Springfield, Mass. 100 Worcester, Mass. 100
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Good sales story put into confusion by poor display.

### COPY FIRST OR ILLUSTRATION

It is common practice in many advertising departments and many agencies to have an artist make up several drawings around which the copy is written. It naturally follows that such copy is written to explain the illustration, whereas the picture should be chosen or developed to fit the sales story or copy. While in some cases, writing the copy to match a picture may be justified, it is not good practice as a general rule for the reason that it destroys the primary function of the picture, which is to illustrate.

A more logical course is to write the story in clear forceful English and then to select the one part that can be illustrated to best advantage. Such a course makes for unity in the advertisement, and makes for a distinct, well defined selling message.

### KINDS OF ILLUSTRATIONS

There are five kinds of illustrations that the technical advertiser has to choose from: charts, mechanical drawings, blue prints, photographs, and original drawings (as differentiated from mechanical drawings).

*Charts.*—The reproduction of charts can be used to advantage where the product is of such nature that the results obtained from its use or the economies effected can be shown. Thus a manufacturer of anti-friction bearings might reproduce a chart showing comparative tests on power consumption; a manufacturer of tractors, showing graphic records of drawbar pull. A considerable advantage accrues from the use of charts as a form of illustration because of the fact that the advertiser is talking in the reader's language, and also the fact that the engineer is inclined to place greater credence in charts than he places in words. A chart is to an engineer what a balance sheet is to an accountant or a financial statement to a banker.

*Mechanical Drawings.*—What has been said of the use of charts as illustrations applies also to mechanical drawings.



## Combining the Good Qualities of Other Materials

Bakelite-Dilecto is remarkable in that it combines in one material the good qualities of many materials with several useful properties which are essentially its own. It replaces VULCANIZED FIBRE with the added advantage of resisting water. It is equal to hard rubber electrically without rubber's limitations of temperature and short life. It is stronger and

harder than most woods but does not swell or warp. It is the only good insulator having great mechanical strength and at the same time capable of being machined like metals.

Samples, laboratory and machine shop tests made upon application.

### Dielectric Strength

From 30 to 5000 Volts per inch depending on thickness. 1000 V. per inch for 1/8" thick.

### Water-proof

Does not absorb water. It is impervious to water.

### Heat-proof

Resists 250° F. continuously. Will not melt.

FOR INSULATIVE USES AND MECHANICAL PRODUCTIONS  
**BAKELITE-DILECTO**  
 A LAMINATED PRODUCT OF PAPER SATURATED WITH RAW BAKELITE AND HOT PRESSED INTO SHEETS, TUBES, RODS, AND SPECIAL SHAPES

"The material of a thousand Automotive uses."

Continental Fibre Co., Newark, Delaware

Vulcanized Fibre—Bakelite-Dilecto—Continental Bakelite

Original Manufacturers of Laminated Phenol Formaldehyde Products.

New York Office  
 222 Broadway

Chicago Office  
 225 N. Michigan Avenue

Pittsburgh Office  
 212 Fifth Avenue

San Francisco Office  
 215 Market Street

Los Angeles Office  
 411 S. Main St.

Canadian Office: Cor. King and Yonge Streets, Toronto, Ontario, Canada

### Chemically

Does not absorb, absorbent, etc. resistant to ordinary chemicals.

### Lightness

Half the weight of most plastics. 1/10th of the weight of wood.

### Tensile Strength

From 10,000 to 15,000 lbs. per sq. inch depending on thickness.

### Workability

Can be machined, turned, drilled, etc. without special tools and without altering shape or weight of the piece. Counts be machined.

# WHAT IS SULPHO?

It is the modern high-speed cutting lubricant—a liquid heavily saturated with Sulphur with such high properties of heat absorption that we will guarantee it to make possible

## 25% to 100% Greater Production

Sulpho is used on all kinds of thread cutting, broaching, milling, gear cutting, automatic screw machine work, etc. It decreases tool grinding by keeping dies and cutting edges cool and sharp, resulting in

## Longer Life for Tools

You want maximum production at minimum cost. Start using Sulpho and speed up your machines 25% to 100%.

## Make Us Prove This

as we have to Buick, Chevrolet, J. E. Parson, General Motors Truck, Nash, Prudden Wheel, Packard, Emerson Tractor, Wickes Bolter, Wilson Motor Co. and many others.

We will gladly send descriptive booklet. Drop us a line.

**Keystone Oil & Refineries—Robinson, Ill., Pryor, Ky.**

**Mfg. Co. Chicago.**  
 Office: Cleveland, O. Saginaw, Mich. Superior, Wis.

Confusion and repulsion caused by poor display.

There are many appeals that can take good advantage of this style of illustration, as for instance material handling systems, the production work accomplished by machine tools, the design of a machine suggesting the incorporation

# C O A L

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*American industries are today almost wholly dependent upon the Coal Mining Industry.*  
*Perhaps there is no question before the American people which more vitally affects each individual than that of Coal.*  
*As a war necessity Congress nationalized our transportation system. The result is a deficit that is appalling, and is one which means dollars in taxation to the people of the country.*  
*There are a few who would nationalize our coal mines. These few are busy spreading their propaganda.*  
*The great mass of American people is guided in its thinking by the genius who attracts their eyes with statements that are extravagant and founded but on half a truth.*  
*They do not stop to analyze these facts:*  
*Coal is the essential in modern industrial life.*  
*Coal is the basic American industry.*  
*Coal is the basis of 1500 branches of industry.*  
*National control necessarily means political control.*  
*If the coal mines are nationalized the bolshevist element could completely demoralize these 1500 American industries, with their strike system, and the great unprotected public would be at the mercy of the few who are in power.*

## The American Mining Congress


*is alive to the great questions that are today facing coal operators. Are you familiar with its position upon this vital subject? Do you know what it is doing to help meet the situation?*

**ADDRESS:**  
**Washington Headquarters, Munsey Building**  
*For Information*

Excellent typography. A study of the advertising section of the Mining Congress Journal convinces one that it is printed by a man who knows the joy of making his craft an art. The printer certainly can make or break the advertising man's display effects.


of the advertised part. The use of this style of illustration, while it appeals to the engineer, should not be overdone for it should be remembered that there is the likelihood of the purchase of these products being passed upon also




by one to whom a photographic illustration would make a stronger appeal. It would seem therefore that the use of charts and mechanical drawing should be alternated in the campaign with or supplemented by photographs.



## Explosives Service


### *Everywhere*



 *Dynamite Mills*  
 *Powder Mills*  
 *Distributing Magazines*

Follows  
the Demand—

**In 1812—**  
*Shipping Powder to*  
*Lake Erie.*



**FOR 151 years** it has been our constant aim to deliver explosives where they were needed—and when they were needed.

In 1812 our wagon trains delivered the powder to Perry which made possible his immortal victory on Lake Erie. In 1920 our motor trucks are carrying explosives from Du Pont mills and magazines into practically every great industrial district in America to aid production and construction everywhere.

Prompt delivery is but one feature of Du Pont Service. It is our aim to see that our customers use the kind of explosives that will give the best results for their particular work at the least expense—and that they are handled, stored and used most efficiently. Du Pont Service saves hundreds of thousands of dollars every year for our customers.

There is a Du Pont mill or magazine near you. Write us about your problems. It is our business to solve them.

**E. I. du Pont de Nemours & Company, Inc.**  
*Sales Dept., Explosives Division*  
**WILMINGTON, DELAWARE**

A "gentlemanly" advertisement.

**Blue Prints.**—While blue prints are mechanical drawings, and while the factors governing the use of charts and mechanical drawings apply to the reproduction of blue prints there is an additional factor applying to this form of illustration, that of color.

# CASTINGS

**HARRISON  
STEEL CASTINGS**

National Car **ISI** Harrison Steel  
Coupler Company Castings Company.

Attica, Indiana CHICAGO Murphysboro, Ill.

**CHICAGO STEEL FOUNDRY CO.**  
CHICAGO, ILL.

**SATISFACTORY—**  
Our castings will satisfy your most specific requirements.

**Steel Castings**  
Make your products reliable, by using reliable castings. Send us your patterns or blue prints for a trial order.

**CHICAGO STEEL FOUNDRY CO.**  
CHICAGO, ILLINOIS

**High Grade STEEL CASTINGS**

**THE BONNEY-FLOYD COMPANY, COLUMBUS, OHIO.**

**STEEL CASTINGS**

**Reading Steel Casting Co.**  
READING, PA.

**"OPEN CAPACITY"**  
FOR THE HEAVIER CLASS OF  
**MACHINERY CASTINGS**  
**CHRISTOPHER & SIMPSON**  
**IRON WORKS CO.**  
ST. LOUIS

**STEEL - CASTINGS**

MODERN STEEL CASTING CO. **MS C** SERVICE **MILWAUKEE WIS.**

**Steel Castings**

**WEIGHING 1 POUND TO 2000 POUNDS**  
Automobile, Steel Castings & specialties.  
Also Specials, Molds, Chimes and Vent-  
ilator Castings.  
Inquiries Solicited. Quick Deliveries.  
**Crucible Steel Casting Co.**  
Lansdowne, Del. Co., Penna.

**STEEL CASTINGS**

**STEEL CASTINGS**

HIGHEST QUALITY **BS** BEST SERVICE

**BURNES STEEL CO.**  
RAILWAY EXCHANGE CHICAGO

**SERVICE** **SMALL - STEEL - CASTINGS**

**THE WEST STEEL**  
**CASTING CO.** OHIO

CLEVELAND

"BE PROVE MOST WHO SERVES BEST" **QUALITY**

A page of small space advertisements, with uniformly poor display. There is an opportunity here for one of these advertisers to secure attention for his small space by the use of comparatively small, light-face type.

The advertiser of the technical product should give careful consideration to the use of color in the reproduction of the working drawing to the extent of making it appear as a blue print by means of printing the drawing with a blue background and white lines and lettering. This adds strength to the advertisement because as with the chart the advertiser is talking the language of the engineer. He is placing before the reader a form of illustration with which the reader is thoroughly familiar; and more, the blue-print effect adds an engineering association to what otherwise might be a commonplace presentation.

*Photographs.*—Any man who does his work passionately well, makes art of his work. Some photographers are true artists. Guided in the selection of subjects by the sales specialist who understands thoroughly the correct appeal that must be made to the prospects for the product, the photographer who loves his work can produce photographs of the product and its service that make the very best form of illustrations for the technical product. Due to its very nature, the technical or professional buyer accepts the photograph as being *inherently* true and accurate; the relation of the photograph to the sales point made may not be accurate, but the photograph itself is accurate. Further, photographs are an inexpensive, powerful means of dramatizing the sales story; whereas to dramatize it with original drawings made by high grade artists is extremely expensive.

*Original Drawings.* Original drawings, unless worked out by a competent artist and unless exceedingly well done have less place in technical advertising than the forms previously mentioned. If well executed they add strength of course to the appeal but if well executed they are costly. And as has been said the average technical advertiser hesitates to spend very much on the preparation of an advertisement where the space itself costs only a hundred dollars.

# ACCURACY IN ALL FORMS

Too great a stress can not be placed upon the necessity for achieving accuracy in all illustrations. The engineering mind is a critical mind and any inaccuracy in the drawing, as in the copy, is likely to impeach the entire advertisement.

## WEIGHTS

Alpenworth, Wm., & Son, Denver, Colo.

## WELL-DRILLING MACHINERY AND TOOLS

The Engineering Systems Bldg. Co., Cleveland, Ohio.

## WET MAGNETIC SEPARATORS

Dodge Magnetic Separator Co., 180 South Street, Milwaukee, Wis.

## WIRE AND CABLE

American Steel & Wire Co., Chicago, Ill.

Edward Mfg. Co., Wilkes-Barre, Pa.

Hendley & Bickel Mfg. & Supply Co., Denver, Colo.

Knitting House, The John A. Thompson, N. Y.

United States Rubber Co., New York City.

## WIRE CLOTH


Endicott-Wire Co., Elm St., Lowell, Mass.

## WORMS (Worm Wheel and Shafts)

Shaw-Walker Supply Co., 17th & Centre Sts., Philadelphia, Pa.

## ZINC (Rolled Sheets and Strips)

Shaw-Walker Supply Co., Elm St., Lowell, Mass.



## Rising Production Costs

May often be checked by installation of improved facilities to increase output; by better engineering to reduce idle time; by economies in the purchase of supplies and fuel; and by working carefully from day to day the numerous items entering into cost of production.

Peabody Coal Mine Management service has helped to solve the problems of many operating companies. It is based on thirty-six years of experience in coal mining and selling. It carries with it the services of a highly specialized engineering and business financial organization when needed.

Our booklet explaining this service will be mailed on request to those interested.

**PEABODY COAL CO.**  
CHICAGO  
St. Louis, Mo.      Cleveland, Ohio      Portland, Ore.

Operating thirty-six bituminous mines in eleven States with an annual capacity of 2,500,000 tons.

# Lamps

We make complete line of carbon lamps of all standard candle-power and voltage.

Especially adapted for mine service.

Prompt deliveries guaranteed.

*Write for prices*

**THE SUNLIGHT ELECTRICAL MANUFACTURING CO.**  
WARREN, OHIO



NEW YORK      BUFFALO

## Bertha Coal Company

General Office  
CHAMBER OF COMMERCE BUILDING  
CLEVELAND      PITTSBURGH      DETROIT

Excellent use made of small space, due principally to the printer's art in display. Another page from the Mining Congress Journal.

Charts, mechanical drawings, blue prints, and photographs can be depended upon for inherent accuracy, for the first three are prepared by men trained to accuracy, while the photograph, unless retouched out of all proportion, is an

exact reproduction. However, care should be taken that the illustration selected matches the appeal and matches the story told in the copy.

### BORDERS

The function of the border is to bind together the elements of the advertisement, so that they will not wander off into surrounding space. Many advertisers use a standard border, having it especially designed, the motif reflecting in one way or another the nature of the business. Some companies introduce the trademark into the border. The advantage of a standard border is that it is a small step in the direction of giving the advertising continuity.

The best border is the one that properly encloses the advertisement and yet attracts the least attention to itself. It should supplement the entire effect of the rest of the display, but should not distract any of the attention it is desired to concentrate on the illustration and copy.

### ARRANGEMENT

Care should be taken with the proper arrangement of the advertisement, and the amount of space for illustration, properly balanced with the space for the text. If study is given to arrangement much can be obtained from a small space. As many men in business have not sufficient time to write a short letter, so many advertising men seem not to have the time to develop a small space to its maximum value. Within the week the attention of one of the authors was called to two advertisements in a weekly paper of national circulation. One of these was a full page in color and the other a single column in black. Thought and study had been put upon the single column advertisement; the product was so arranged that it formed natural arrows that led the attention directly to the text, which was short, clear and forceful. The other advertisement depended upon full page space and color to attract attention. It was poorly arranged, the use of color greatly exaggerated,

and the text awkward and cumbersome. It had much less sales value than the smaller advertisement.

### SIMPLICITY

The technical advertisement as regards all art work must have simple decoration. Extravagant hand lettering has no place in this form of advertising. The value of art work, of illustrations, in advertising lies many times in what is left out of the illustration rather than what is put in. Like pepper and salt in our food, art work should be only suspected. With too many accessories introduced into the advertisement, with too many little boxes of type, with too many gee-gaws, the main idea, the big idea, of the advertisement has no chance. In the copy and in the illustration there should be one dominating thought, and this treated simply.

### TYPE

In addition to all of the general advantages of good type display, there are certain uses of type that can be made to suggest some quality of the technical product, the character of the institution, or other values peculiar to the advertising problem in hand.

### DISTINCTION BY CONTRAST

Distinction for an advertisement can be achieved and attention attracted to it by making its characteristics of display different, in some way not inconsistent with the dignity of the sales story, from the general character of the display prevailing throughout the advertising pages of the particular magazine in which the advertisement is to appear. And more definitely, the characteristics of display of the advertisement can be made different from the characteristics of display of the advertisements immediately preceding and succeeding the advertisement, in the section of the magazine devoted to advertising products similar



to the one for which the advertisement in point is produced. In the case of many magazines that classify their display advertising a manufacturer's advertisement runs consistently among and close to the advertisements of his various competitors. Frequently this group of advertisements will have uniform characteristics of display. The manufacturer, therefore, can achieve distinction and thus draw attention to his sales message by breaking away from the uniform characteristics of display of the group.

## CHAPTER XVII

### TECHNICAL ADVERTISING COPY

Principles that govern all classes—The headline—Literary value—  
Technical accuracy—Too many superlatives—The three classes of  
copy—General copy angles—Human interest appeal—Gathering  
material—The technique of copy—The right copy for a given  
paper—Copy needs study—Direct results.

#### PRINCIPLES THAT GOVERN ALL CLASSES

The copy of the advertisement, whether the advertisement is space in a magazine or a direct-mail piece, is the sales argumentation in written form. The theme is governed by the objective sought for, as it is in the personal presentation made by a salesman.

Copy generally may be divided into three classifications: copy to obtain orders, to obtain inquiries, to build good will. There are certain fundamental principles, however, that govern all copy, regardless of its classification; these will be discussed before the requirements for any specific copy.

Copy must be genuine; it must have in it the ring of sincerity, of truth. For what is not said in an advertisement, what is read between the lines, is just as powerful a factor as the thought expressed in words. As a salesman in personal presentation of sales argument oftentimes either closes or loses an order by his possession or lack of convincing manner, of sincerity, of belief in the truth of every statement, in like manner the written advertisement either gains its objective or loses it by the unread and unseen stamp of sincerity or hypocrisy. Regardless of all the art and craftsmanship of writing, of perfect expression, of ease in rhetoric, unless the writer believes what he writes, that advertisement cannot obtain the maximum good.

To obtain this essential of sincerity the writer must know his product and know it thoroughly. No superficial reading of a catalogue, no walk taken quickly through the factory where the product is made, will enable any writer to write convincingly about a product, any more than the same preparation would enable a salesman to go out and talk convincingly. At the risk of a voice from the crowd crying, "heresy", the statement is made that no matter how clever a copy man may be with words, he cannot put into his advertisement anything more than he believes himself. If the blood does not course freely through every paragraph and every sentence, if the pulse of the writing is so faint that the reader can hardly detect it, such advertisement might better never have been written.

Manufacturers have schools for the training of their salesmen, or not having organized schools, insist upon a salesman's "hanging around" the factory for a period of at least several weeks, before he is permitted to take his first trip, on which he might possibly talk to fifty prospects. And yet these same manufacturers will employ an advertising manager or turn their advertising work over to an agency and expect to see, within two weeks, advertising copy that will reach many thousands of prospects.

### THE HEADLINE

The approach of the salesman and his first statement is to the final canvass what the headline of the copy is to the advertisement.

Some one showed to Voltaire a two line epigram. "It is good," said Voltaire, "but it drags in spots." A headline might be termed a condensed epigram, from which every unnecessary word has been pruned. A four-word headline is good, but it drags if the same thought can be expressed in three words.

There was a day in advertising when the illustration could be depended upon to attract attention to the advertisement, to insure its being read. But that day has been

forced into the past by super-illustrations. To-day, in magazines of national circulation the advertising pages hold more of real art than do many of the editorial pages. In many cases artists whose work can be found in the advertising pages cannot afford to work for the editorial

## ***Straight Line Cleaning Methods are Essential***



**"ROUND the circle" work** doesn't pay. The faultless work of the machining departments often is held up in the assembling room because of improper cleaning methods.

This means a trip back to the cleaning room—unnecessary labor, unnecessary use of materials, loss of valuable time in production.

Oakite cleaning methods are straight line methods. Oakite cleans at once—and cleans thoroughly.

The assembling room becomes a transient point instead of a frequent terminus in the journey of materials through the plant.

An instance: A certain plant formerly used caustic and lye to remove mineral oil and graphite compound from cylinder blocks. Operation took 15 to 20 minutes, with frequent "come-backs" from assembling room because the metal was not clean. Now Oakite does the work—in half former time—and 100% right.



*May we save you?*

**OAKITE** MANUFACTURED BY  
OAKLEY CHEMICAL CO.  
85 THAMES STREET, NEW YORK

## **\$500 in Cash for the Best Articles!**

Subject: The Importance of "Cleaning As An Essential Manufacturing Operation." What is your opinion? Open to all. Write for full details. Closing date April 15th.

The pace of modern industry is such that the cleaning department must keep up with the rest of the plant—or production will be retarded.

The cleaning of metal or other parts in the process of manufacture has become an essential operation—as vital to the finished product as machining or any other step.

It is logical that the acceptance of this truth forced the development of a science of cleaning. The Oakley Chemical Company was a pioneer and for eleven years has been the leading exponent of the science of industrial cleaning. It has demonstrated that by the application of scientific and tested methods and materials for cleaning, production is increased—quality of the work improved, time saved—and costs reduced.

An industrial cleaning problem must be approached from the correct technical viewpoint—investigated as to what happens before and after the work is cleaned—how it is cleaned—and how any change would involve each step.

Oakite Service has succeeded because it is based upon—and has put into execution—these fundamental principles.

If you have a cleaning problem—ask us.

**OAKITE**  
MANUFACTURED BY  
OAKLEY CHEMICAL CO.  
85 THAMES STREET, NEW YORK

KEEP THIS PRIZE IN ADVANTAGE

Good headlines and copy.

departments. And, because of the intense competition of the illustrations, more and more upon the headline falls the responsibility for attracting the reader's eye to the advertisement.

The appeal to curiosity is almost universal. A state-

ment of strange and surprising fact, boiled down so that there is no word to drag, cut and pruned so that no one word can be omitted, will usually attract attention, arouse curiosity, and lead the reader into the copy of the advertisement.

Thus if a manufacturer of a machine tool accomplishes in a certain shop and under certain conditions, better results than ever before have been accomplished, a bare statement of that to serve as the headline, will arouse curiosity on the part of those who can use such a machine, of those who are confronted with the same problems as the manufacturer in whose factory the demonstration is made.

Infinitely better is such a headline, even though it drag and contain unnecessary words, than the headline that announces the product and its builder's name.

A study of technical copy will justify the statement that many times a splendid headline is buried in the body of the copy, while a weak statement is permitted to serve as the headline. This condition exists because of the practice followed by many copy writers of first writing the headline and then writing the copy to fit the head. And, apparently, they have in mind always some unwritten law that states that a headline once established must not be destroyed.

#### LITERARY VALUE IN COPY

There has been much discussion of late as to the literary value in copy. The question, "To what extent should an advertisement be literary?" has been argued pro and con, with the net result, it would seem, that those few gifted copy writers who can place in their advertising a distinct literary touch, hold that it is essential, while the less-gifted hold that it is non-essential.

The whole debate, however, in the authors' opinion, can be settled by the correct answer to the question, "To what degree should a salesman be a refined, cultured gentleman?" As copy is the sales argumentation in written

form, it would appear that the value of culture in copy can be determined by the value of it in the salesman.

All will agree that the day of the checkered-suited and red-necktied salesman who was as lavish with questionable stories as with questionable cigars, is a day that is gone. In his place we have the engineer type of salesman who has been graduated from a technical school or has received his education in the shops. This sales-engineer (and recent practice tends to drop the "sales" from his title) is schooled in the belief that sales are secured not by stories and cigars, not by being a good fellow, but rather by knowledge and service and by being always a gentlemanly fellow.

It would seem then that the same principles apply to copy. And while the nature of the product and the class of buyers govern to what degree the copy should carry a literary touch, the principle can be established that copy should be literary to some extent, rather than boisterous, impertinent, and ruffianly. A house is judged by its representatives—and its advertising. There is ample justification for a touch of culture.

Much that has been said in the preceding paragraphs as regards a literary style in copy applies to dignity in copy.

That there shall be no misunderstanding of either word as applied to copy, however, let it be clearly understood that dignity and a literary touch in copy do not mean simply a free use of words of many syllables, or frequent references to a thesaurus on the part of the copy writer. High sounding and well balanced words in themselves do not make good copy nor do they add literary value or dignity. First, there must be the selling idea. But with this selling idea established clearly in the mind of the copy writer, the text can and should carry it to the reader with both dignity and a literary value.

Before leaving the question of dignity and literary value in copy there should be considered the error likely to be made by the copy writer whose sole knowledge of his profession consists of the idea that if an advertisement con-

form to a few standard rules it is a good advertisement. This is the error of mistaken appeal, engendered by a lack of knowledge of the class of people who will read the advertisement.

Probably the most glaring example of this is the advertisement appealing to the farmers, and written by one to whom a farmer is a "rube". Much of this copy (and a perusal of technical advertisements in farm papers will justify the statement) is written down to the farmer or, as the copy writer proudly supposes, in the language of the farmer. A visit among the farmers, a trip among the people the advertisement is to interest, would be a liberal education to many a copy man.

With proper respect, however, for literary value and dignity in copy there is no need to make it so solemn as to be boresome. There can be literary touch and dignity and yet a sense of humor and human appeal; for the test of real literary value in copy is the readability of the advertisement, the humanness of it.

### TECHNICAL ACCURACY NECESSARY

Technical copy, as has already been emphasized in a previous chapter, must be technically correct. While this would seem to be an unnecessary statement to make, a study of technical advertising will demonstrate the need for it. The audience reached by the technical advertisement is critical. The copy may be written in masterful style, and the message may be properly dramatized by the good use of illustrations, and yet if it is not correct technically the whole advertisement is impeached in the mind of the engineer reader and buyer.

It would seem, therefore, that the safest course to pursue in the preparation of the technical advertisement is to have the copy prepared by the advertising manager, and approved, checked, by an engineer. This for two reasons: that the engineer may approve what is said about the product and also what is said about the application of the product.

The fact should not be overlooked, in addition, that possibly the advertisement is to appeal to an executive who might have to pass finally on the purchase of the product and yet who is not an engineer. Here, there is a stern line of demarcation, established in most cases by the magazine or journal in which the advertisement is to appear. If the paper be strictly a technical one, read for the largest part by engineers, the copy appeal should be different from the appeal of the advertisement in a semi-technical journal, read by the business executive. While in both instances the advertisement must be technically correct, the degree that it is technical in language and illustration, must be governed by the question, "Who is going to read it?" In the advertising of general commodities, the same copy can be used in a long list of magazines, but it is seldom that a technical advertisement can be used in more than one paper because of the highly specialized appeal. The motive governing the purchase of the product, or a kindly reaction toward the product, is different in the minds of the engineer and the business executive. The first is attracted to the product by its proper design, and the general engineering principles involved; the second by the return on the investment. Both the engineer and the executive may have both points in mind, but either will give the more consideration to the point he is more familiar with in his work.

The effort to make the advertising technically correct, however, should not be confused with making the advertising cold and stiff. Engineers are engineers and constitute a critical audience, and yet, too, they love and live, have homes and gardens, drive automobiles, and play golf. It is said that when Tennyson wrote the poem *The Vision of Sin* in which there appeared the line, "Every moment dies a man, every moment one is born," Charles Babbage the inventor of the calculating machine wrote to the poet that if the statement were mathematically true, the population of the world would be at a standstill. And he suggested a revision of the line, to read, "Every moment dies



a man, and every one and one sixteenth, one is born." Not all engineers are so exact.

### TOO MUCH ADVERTISING, TOO MANY SUPERLATIVES

Technical advertisements should not be too full of advertising. It is not necessary that the name of the product and the name of the manufacturer appear every time reference is made to the product. By way of example, "this machine tool" can be used instead of "the Handers' Lathe made by Handers Brothers." What the tool will accomplish beyond other tools of similar nature is of more interest than constant reiteration of the name.

As in all lines of endeavor, there is the line of least resistance that offers an easy path to the writer of technical copy who has not in his make-up the craftsmanship of work. This is to use general copy that means but little to the engineer; to disregard the importance of suitability of copy to a certain magazine; to fill space with banal sentences and paragraphs; to use the worn out superlatives of "best" and "greatest" and "finest"; to use the hackneyed words, "most efficient", "most durable", "most economical". There seems to be a striving on the part of many present day copy writers both in the general and the technical fields to outdo one another in adjectival redundancy; to get away from a logical statement of fact expressed in simple words.

There is after all, only one way to write technical copy, or copy of any kind for that matter and that is to get a good writer, one who understands his subject thoroughly, one who believes in the product, and one who has in his heart sincerity and a high regard for truth; then, to let him write it, and writing, to forget that he is writing an advertisement.

### THE THREE CLASSES OF COPY

As has been stated, copy generally may be divided into these three classifications: copy to obtain orders, to obtain inquiries, to build good will.

*Copy to Obtain Orders.*—Copy to obtain orders is distinctly the sales argumentation in written form. It must pass through the stages of attention, interest, desire, and action.

*Space.*—This means first, that sufficient space must be used, for the four essential phases cannot be packed into a quarter page or a half page. To tell the complete story, means length, just as for a salesman to tell his complete story means time. The salesman, if he is soliciting an order, cannot expect to make the call a successful one if he has to deliver his message over the reception room gate while the prospect constantly plays with some papers or frequently glances at the clock. The prospect's attention is divided amongst others in the reception room, the papers in his hand, and the clock. And the advertiser who attempts to tell his whole story, to get an order, in a half or a quarter page is sharing the prospect's attention with the other advertisers on that page.

*Attention.*—Attention must be drawn to the advertisement. This can be gained through the proper use of illustration, the proper headline, or a striking typographical arrangement.

*Interest.*—The reader must be interested in the story; and the theme of the story, the viewpoint from which it is written must conform with what the market analysis has shown.

*Desire.*—The third requirement for the copy that aims to obtain orders is that of desire. The word here is used to mean the desire to possess the product advertised, and the desire to possess any technical product can best be aroused by reason-why copy, or a clear, logical statement of reasons for the superiority of the article.

*Action.*—The fourth requirement is that of stimulating action, to make the reader send in an order or to write for additional information. This can be obtained by the properly worded, direct command, to send in the order, or, if the product is one sold by certain distributors, by listing these distributors and making the positive suggestion that the

reader write to or visit the nearest one. This appeal for action never should be worded in the form of a question as, "Do you not think you should investigate this?" but rather by the positive, affirmative word.

*The Coupon.*—Many times the coupon is used to stimulate action; its value, however, in technical advertising is to be questioned. The idea behind the coupon is that it makes easier the placing of the order or the request for additional information. The popular conception is that so long as an advertisement carries a coupon it is going to pull results. This, however, is not logical for it is not the coupon that pulls, but rather the offer or proposition behind the coupon.

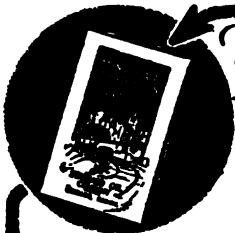
Before the use of the coupon is decided on the following questions should be carefully considered: Will it actually help the advertisement? Does the advertisement really need it? and, Is the advertising to pull replies or to be only educational? If it is decided to use a coupon, it should be as carefully designed as the headline or the copy itself. A plenty of room should be allowed for the reader's name and address and thought should be given to the information requested.

Again, if the coupon is to be used, its place in the advertisement should be carefully worked out. Every effort should be made to have it on the open margin, that it may be clipped readily or torn off. A coupon on the bound margin is not likely to be used.

*Copy to Obtain Inquiries.*—Much that has been written on the first general classification, copy to obtain orders, applies to the second classification, copy to obtain inquiries. In this classification, however, less attention can be paid to desire and action. The same value, however, is placed upon attention and interest. And as two of the essentials for copy to obtain orders are dropped, the advertisement to obtain inquiries can be a smaller advertisement; the message can be told in smaller space and at the same time all of the message can be told.

For this reason, the advertisement for inquiries appeals

more to the manufacturer who has a small appropriation. He can obtain inquiries from a small advertisement and follow up these inquiries with direct-mail matter that tells the complete story.



## Yours for the Asking

Send for this New Illustrated Booklet  
on Mine Car Lubrication

**THE Standard Oil Company**  
(Indiana), has just published a  
booklet which points out the  
methods of eliminating certain losses in  
the transportation of the coal from the  
working face of the mine to the tippie.

It is the purpose of the booklet to save money for you by lowering  
the cost of wear and tear; by lowering the cost of overcoming friction;  
and by lowering the cost of lubrication.

The booklet illustrates and describes the different lubricating  
methods used in the various types of mine car wheels and axles, and  
explains which grade of Superia Mine Car Grease is best suited to the  
particular equipment in use in your mine.

—This grease is made in three consistencies:—

**Superia 18 Grease    Superia 39 Grease**  
**Superia 57 Grease**

These three grades vary only in consistency or body—not in quality, meet the  
requirements of every make and type of wheel and axle in use in mine cars.

They are greases possessing unusual lasting qualities. One filling will last from  
one to six months, depending, of course, upon the type of wheel, the condition of  
the equipment, and the service required of the car.

Superia Greases are insoluble in water. They are not affected by acid, by  
water, or by gases that may be present in the mine. In fact they effectively seal  
the bearings and protect them from outside action.

Superia Grease will not harden or gum, separate or break down, but  
will allow a free rolling of the wheel.

The Standard Oil Company (Indiana) offers these greases with  
the firm conviction that they are the best that can be made for  
the lubrication of mine car wheels.

A copy of the illustrated booklet is yours for the ask-  
ing—mail the coupon today.

**STANDARD OIL COMPANY**  
(Indiana)  
909 So. Michigan Avenue    CHICAGO

**MAIL THE COUPON TODAY**

Please send me a copy  
of the booklet on Mine Car  
Lubrication. My name is  
\_\_\_\_\_ and I am  
\_\_\_\_\_ of \_\_\_\_\_  
\_\_\_\_\_.

Name \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_

Good use of the coupon. The coupon is in the right place, at the lower outside corner of the page.

*Good Will Copy.*—Copy to build good will, the third general classification of copy, is not for the small advertiser, for it is a campaign of size, a campaign of full pages in a considerable list of mediums. It is a campaign to establish prestige, to educate a public to a kindly feeling toward a given house or product. It does not pay for itself in direct

results but is rather general publicity, or general advertising.

In technical advertising where an analysis has shown the market to be clearly defined, and where, even going further, it has shown a limited group of men who influence the purchase of the product, general advertising in the broad sense, has no place. For here, all advertising can be used to sell the product direct, or through distributors, or to obtain inquiries. And while the advertising can be used for these direct results, it can, also, if skillfully worked out, create good will and kindly feeling by typographical effect and pleasing appearance.

There can be no question but that in the days to come, when more is known of the laws of advertising, when the business of advertising is regarded in the proper light both by those in it and those who use it, general advertising will be an almost unknown factor. And rightly it should be. A manufacturer would not be regarded in his proper mind who put up a building and did not know what it was to be used for on completion; then why should he purchase a general campaign, or advertise for general publicity, when there is nothing definite, nothing tangible to be gained by such advertising?

#### GENERAL COPY ANGLES

The writer of technical copy who would serve best must have a fund of information as to the product he is advertising, its many applications, and must be always on a hunt for new copy angles. And always are there new angles to be discovered if the search be continued intelligently and persistently.

The news element in copy should be given careful consideration; careful, lest by the time the advertisement appear in the publication the item inspiring it is no longer news, and, lest it be a news event with which the public has grown weary. Again, care in the news item should be exercised to avoid the selection of an event that is of such predominating interest that all advertisers are likely to try to make their advertisements tie to it.

# EVERY YARD GUARANTEED



—this means your protection—the complete elimination of all loss and waste.

Every roll or cut sheet of National Tracing Cloth must be free from blemish or imperfection, or you may send it back to be replaced at our expense.

Send for a sample sheet and put National Tracing Cloth to these tests:

*First*, look through it. Even the most casual glance will reveal the even, supertransparency of National.

*Second*, draw on it. Its superlative surface and uniform weave enable you to carry out the finest detail.

*Third*, erase and draw again and again. Note the body strength of this really "national" cloth—the only tracing cloth made in America.

*Fourth*, twist and rumple it. Not a crack appears. National may be continually subjected to handling and yet retain its freshness.

It was not chance or guesswork that made National Tracing Cloth the Standard. Every foot is carefully inspected in a determined effort to make National a tracing cloth of unequalled quality. A trial will convince you.

SEND FOR A FREE SAMPLE SHEET TODAY

NATIONAL TRACING CLOTH CO.  
SAYLENSVILLE, RHODE ISLAND  
NEW YORK OFFICE: 12 LEXINGTON STREET

*National*  
TRACING CLOTH

107-7

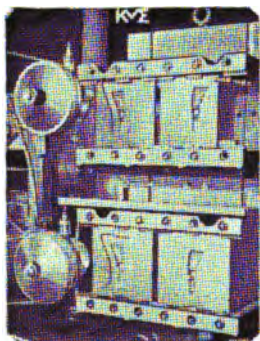
11 The Trial Coupon  
To NATIONAL TRACING CLOTH CO., Saylensville, R.I.  
Send me a FREE sample sheet of National Tracing Cloth for my business use. (No charge.)

Name \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_  
Mail it in today!

Good salesmanship expressed in advertising tracing cloth. The coupon fits in well with selling such a product, and is placed well.

# KME

*This Man  
Solved the  
problem of  
Die Supply*



Three-tooth die being cut automatically on the Keller machine.

## "It beats me!"

I've combed the whole city, and I've advertised, and can't find another die sinker. How do you manage to keep up your production?"

"Why, I was up against the same thing: couldn't get dies or die-sinkers, and I had to turn down some big orders. Then one day I happened to be going through the Blank Plant, and noticed some machines turning out dies automatically; they were **Keller Automatic Die-Sinking Machines**. I wrote the Keller people for information and as a result, installed two of their machines; now I have two more on order."

"**Keller Automatic Die Sinkers?** Why, I saw one some years ago and didn't think so much of it. Doesn't it require a lot of skill to operate and have a good deal of hand work to be done on the dies?"

"No indeed! I remember that old type, but the **Keller Machine** of today is a different proposition. The beauty of it is that the average mechanic can keep as many as three going and they operate entirely mechanically beyond a little preliminary roughing out. They turn out beautifully matched dies. I advise you to write Keller."

*That's good advice.*

**KELLER MECHANICAL ENGRAVING  
COMPANY,**

80 Washington St.,

Brooklyn, N. Y.

KMB-4

# KELLER

## Automatic Die Sinkers

*Co-operate:—Refer to The American Drop Forger*

Good material; good, natural copy. Poor display; poor use of type.

## The Story of Allopas

Allopas Ball Bearings are the nearest approach to indestructibility yet devised. It has been proved that they wear from three to six times as long as the conventional case hardened cup and cone ball bearing.

This wearing quality is so marked that every set is guaranteed for the life of the car on which it is used. Before making this written guarantee Allopas bearings were carefully tested under service conditions. Under the same tests the best types of conventional case-hardened bearings failed at from 2000 to 7000 miles, while Allopas bearings registered

30,000 miles without perceptible wear.

This result is due (1) to the Specially Rolled High Carbon, Heat Treated Alloy Steel of which Allopas cups and cones are made; (2) to the process of manufacture which makes it possible to use alloy steel for this purpose at a slight advance in cost as compared to ordinary Low Carbon Steel.

Cups and cones made of ordinary steel are case hardened on the surface only, and the effect is to produce an uneven shell of hard surface over a core of softer metal.

When slightly worn, rough spots or pits are formed in the path traveled by the balls, which tends to chip and crush the balls.

Allopas cups and cones are hard throughout. For that reason they wear slowly. They are tough, and for that reason do not break.

They also wear evenly. After being tested for 30,000 miles the path of the balls is hardly perceptible, and above all, is perfectly smooth and even. Therefore the balls were preserved in perfect condition.

Except for this difference in material Allopas Bearings are standard in size and construction. They are packed in pairs and sets in substantial boxes containing the written guarantee, and complete directions for applying.

Car owners whose dealers do not carry Allopas Bearings in stock should write direct to the factory. Good dealers should stock Allopas Bearings as there is an increasing demand for them among all well informed car owners.

Testing samples of Allopas Products will be supplied to qualified Automotive Engineers who write us on their business stationery. The line includes Piston Pins, Spring Shackle Bolts, Cup and Cone Bearings, Thrust Bearings, Valve Stems, Valve Lifters, Deep Drawn Parts of Special Design, Stampings, etc.

**The Alloy Parts Manufacturing Company**  
CANTON OHIO

Pleasing appearance; confusing and monotonous detail.



During the first few months of the great war the copy man who did not succumb to the temptation of introducing a war idea into his copy was the exception, and some of the results were fearful to behold. For instance a manufacturer of ball bearings used as an illustration a drill master giving the command of "Forward March" to a line of bearings. The illustration was poorly worked out and the idea ludicrous. The copy had no connection with either the headline or the illustration.

## **FOR SALE**

**One Thirty-Light**

### **Detroit Combination Gas Machine**

**with Six-Burner Blast Furnace**

*Also Complete Assortment Laboratory Supplies and Equipment*

**All new and unused**

**Quotation and specifications upon request**

**AMHERST FUEL COMPANY,**

*J. B. KIRKPATRICK, Purchasing Agent*

**LUNDALE,**

-

**WEST VIRGINIA**

Very effective use can be made of the space in trade or technical magazines for advertising special sales.

Again, another manufacturer during the war sent out a piece of direct-mail matter in which he used the headline, "There Has Been a Revolution". The copy went on to explain that there had been a revolution in business, that old methods had given way to new. The piece did not pull however and an investigation proved the fact that while the advertising tied up to the news of the day, the public was weary of wars and revolutions and all that the words connoted.

A copy angle that has been introduced with success to the originator is that of using the employees that make the product. This plan tends to advertise the house to the exclusion of any one product and while it thus partakes of general or publicity advertising, it can be confined to selling the product if skillfully handled. And this angle is a logical one to use, for the reason that confidence must be established in the mind of the prospective buyer and proper exposition of the employees helps to do this.

A company in Cincinnati manufacturing gears used this idea to advantage. The copy described the factory building, which, unlike the average machine shop, was practically all windows. The fact was brought out that all machines were in an equal flood of natural light and the workmen themselves were, as a consequence, healthier, happier and more efficient. The conclusion, and a logical one, was that a product made in such a shop and under such conditions of contentment must be a good product.

An advertising manager was walking recently through a plant where small motors are made. As he passed a bench a workman let a wound armature drop to the floor. Quickly he picked it up with the remark, "A little drop like that does not hurt the *Such-and-such* motor." The advertising man was quick to catch the idea and at once made a memorandum in his note book. Later on this incident was made the subject of a bulletin sent to the trade.

In addition to the factory where the product is made and the product itself, the application of the product offers a prolific field for new copy angles. The manufacturer of a motor driven shop truck, by way of example, advertised his product almost exclusively by specialized mediums, in each of which the copy told of the results obtained by a prominent user in that line. Thus, in the confectioner's trade paper, there was illustrated the use of the trucks by one of the best known confectioners, in the cement journals the use of the truck by one of the prominent cement manufacturers, the copy giving definite results obtained.

### HUMAN INTEREST APPEAL

This is probably one of the most interesting and at the same time difficult copy angles to be worked out, and yet the extent of the difficulty is set only by the degree that the imagination and vision of the copy writer are limited.

In every product, technical or otherwise, there is a big human element, a big human interest story. Within the four walls of every factory there is a story of ambition and achievement, of disappointment and success, that is potential for an advertisement that could be made as interesting as any news story in the editorial pages. But, as has been said, this story is not printed in big type in an open book to be read by all, but rather is open only to the man with vision and imagination.

A manufacturer of pyrometers featured his product as being something mechanical, yes, but something, too, that recorded certain results far more accurately than could any man—any human being. These advertisements pictured the furnace operator of old who prided himself upon his ability to judge the temperature of the furnace by a glance at the color of the interior; and then pictured the pyrometer, an instrument that could render a more accurate service than could ever be achieved by man.

A unique example of human interest appeal was afforded recently in a series of advertisements which appeared over the signature of the American Bronze Company. The first of these advertisements was addressed to, "Mr. Doan and Mr. Robinson of the American Tool Works." And the copy went on to say that these gentlemen had made a statement in their catalogue that, "a machine tool's life is dependent on its bearings." Their attention was called to the fact that Non-Gran bearings, (the product of the American Bronze Company) would last twice as long as would any other bearing and therefore, would lengthen the life of the machine-tool. Other advertisements followed that were directed in the same manner to other manufacturers. This was a daring appeal, a daring use of a

human interest angle but it is recorded that the campaign was very successful.

Many instances might be related where advertising men with vision and imagination have profited by the introduction of the human interest appeal. As has been said, the extent to which this copy angle can be used is set only by the ability of the copy man to read the greatest book of all, the book of life.

Permitting the consumer or user of the product to write the copy, indirectly, offers a distinct and interesting copy angle. The reproduction of a letter of appreciation, sincerely written, is of interest to others who might have use for the product. A quotation from some prominent user will carry more weight oftentimes with other users than anything the advertiser might have to say. But these letters and these quotations must be genuine and must give the names of the persons quoted. To make the general statement that a "prominent mining engineer" says this and so, means little or nothing. It partakes too much of quack advertising.

With the introduction of new copy angles it must be remembered, however, that "frills" and "stunts" have no place in technical advertising. The step to clothe technical advertising in over-alls is a step in the right direction. When the engineer purchasing agent, or the executive or the head of a great manufacturing plant reads his trade paper his mind is sternly set upon his business. While he may read it in the quiet of his home, he is, nevertheless, in spirit, at his factory. As he reads this paper, he hears the whir of machinery, the rumbling of great trucks, he sees the loading of cars at his shipping platform. And he wants manly copy, because it appeals the more to his business nature. Then, he has no more time for, or patience with "frills" than he has during the busy hours of his day.

#### GATHERING MATERIAL FOR COPY

The advertising manager or copy writer who depends for his material upon that which can be obtained within

the four walls of his office, is going to write copy that is deadly dull, that is bromidic and full of "glittering generalities". The advertising department or the copy writer's office is the study in which to prepare the copy, to phrase it and to balance word for word. But his material, his ideas, must be gathered elsewhere.

Mention has been made of an advertising manager who got a copy idea from seeing an armature dropped by a workman. This advertising man has accomplished worth while results for his company; he has prepared splendid copy, that has been human, that has been interesting, that has been technical and yet too, non-technical, and withal has carried in it a real sales message. And this man knows every department of his factory as does the superintendent; he knows the workmen as well as the paymaster does. He attends the meetings of all the associations and clubs.

And too, he knows the customers and the applications of the product; he spends a large amount of his time travelling among the customers obtaining their view-points, studying his product in operation. He insists, also, upon his copy writers doing the same thing. This man is never at a loss for ideas, for material. He has series of advertisements planned and prepared long in advance and his method affords ample time for study, ample time for re-casting and revising, ample time that he may obtain from them the maximum good.

The advertising manager or copy man who does not cultivate the salesmen, and talk over their work with them, overlooks a wonderful source of ideas. Usually a salesman if asked for advertising suggestions has none to offer. But at lunch when he is telling of some of his experiences, unconsciously he makes mention of incidents that give the advertising man many ideas.

The trade papers frequently offer suggestions and ideas but it is a statement of fact that these papers are not studied by the average advertising manager to the extent they should be. Quickly they accumulate and quickly there is a huge pile in the corner of the advertising depart-

ment, the very appearance of which discourages the advertising man from the idea of looking them over. Finally there comes a general house cleaning day when the pile is thrown out—and little does the advertising manager appreciate that he is throwing out a valuable lot of “thought starters”.

Perhaps, some advertising managers, upon reading this, will say, “If I read all the papers that come to my department I should do nothing else.” It is not necessary that these papers be read, every word of every article. It has been said of Theodore Roosevelt that he could read a most scholarly book within a few hours and yet give the idea, the big thought, that the writer had in mind. And in like manner the advertising manager should train himself, should develop a sense that enables him to judge quickly the value of an article for his work. He should be able to grasp quickly the one big idea of the author and to overlook the nonessentials.

It is easy to write bromidic advertising copy. It is easy to write “lazy copy”. A comfortable chair, a typewriter, a pipe, a what-shall-I-say attitude, these are all the requirements. This is advertising, pale anæmic advertising, on which the manager and the board of directors must be sold ever so often. And it is just as easy to write real sales advertising, advertising that produces results, advertising that makes itself felt as a force in the business, advertising that makes the manager not only willing but eager to increase the advertising appropriations. But this means gathering material, it means being always on the lookout for material, it means thought and study on the part of the advertising manager.

### THE TECHNIQUE OF COPY

To give proper consideration to the subject of technique of copy, to the craftsmanship of writing, would require in itself not only one volume but many. Therefore, the subject here can be but slightly touched upon with a passing consideration for the fundamentals.

The use of good English in copy is not only to be desired but is absolutely necessary. In preceding paragraphs of this chapter, a comparison has been made of the salesman with the advertisement and in the consideration of good English this comparison may well be carried further. No sales manager or executive would employ a salesman who could not express himself clearly and grammatically. Because the written word can be analyzed, because it lacks the personality of the salesman, it is of greater importance that it be correct.

Too much stress cannot be laid upon the use of the proper word, for a study of advertisements will prove the statement that many copy writers do not say what they think they say. The words, "allow" and "permit" have different meanings and yet are too often confused or regarded as synonyms. The words "buy" and "purchase" have different shades of meaning. The word "affect" does not mean "effect" nor can "continuous" be used for "continual". The adjective "unique" cannot be qualified; nothing can be "more unique" or "most unique". It would indeed be a simple matter to continue such a list over many pages. The subject may be passed, however, with the general statement that there is one word that will best express a given meaning and the copy writer who would be a craftsman will search until he has found that one word.

An understanding of structure is as essential to the copy writer as it is to the author who would write a "best seller". There are three general principles of structure: unity, mass, and coherence. Unity has to do with the substance of a sentence or a composition. If a piece of copy have unity then every word centers around one fundamental idea and every sentence and every paragraph is dominated by one essential thought or purpose. The principle of mass is that of placing the most important ideas of the composition or the paragraph or the sentence in the places that most readily catch the eye or ear. Periods, commas, semi-colons and colons are eye-resting places. It follows,

# The Goal

**W**E in this organization have a definite goal toward which we are working. And it is not a goal of big production, of great volume; it is not our ambition to see processed through our shops huge tonnage of iron and steel. It is not a goal of cubical factory space, nor of great sales volume as measured by dollars and cents. It is not a goal, either, toward which we are hurrying with such speed that we have not time for the finer things of life.

It is a goal, rather, where merit sets stern limit upon production and where volume must be measured by service. We believe with Emerson that, "the greatest success is confidence or perfect understanding between people." And the goal toward which we are working is to make our business a bigger, better business, to grow, always, but to grow only so fast as we can keep faith and confidence with all.

**STEPHENSON**  
INCORPORATED  
One West Thirty-fourth Street  
New York City

MAKERS OF THE STEPHENSON PRECISION MADE PHONOGRAPH MOTOR

The reader can write his own criticism of this.



therefore, that in the properly massed sentence the most significant words come close to the periods, the less significant closer to the lesser marks of punctuation and the least important words in the unbroken stretches of words. Coherence is the principle that words closely related by their share in the thought to be conveyed shall be kept together.

A second essential to good copy is an understanding of the principles of quality, which briefly are, clearness, force and elegance. Whatever in a piece of copy is said to interest the reader appeals to him in one of three ways; to his understanding, to his emotions, to his imagination. Clearness is the intellectual principle of style, force the emotional, and elegance the imaginative.

Good writing consists of unity and quality; and the principles of each should be so clearly understood and so well grounded in the mind of the copy writer that he adheres to them unconsciously.

#### THE RIGHT COPY FOR A GIVEN PAPER

In technical advertising copy, attention must be paid to the importance of writing the copy for the particular paper in which the advertisement is to appear. And the theme of the copy, the view-point from which it is written, is determined by what the analysis shows of that market and a study of the editorial pages of the paper.

For obviously an advertisement written to appeal to the readers of the *American Machinist* will not interest the readers of the *Engineering and Mining Journal*; an advertisement written for *Iron Age* will not interest the readers of *Mill Supplies*.

If the product be one that is advertised direct to the user through the pages of such papers as *American Machinist*, *Machinery*, but sold through dealers throughout the country, the advertisements in these papers would aim to sell the product by mentioning the advantages to be obtained from the use of the product, whereas the advertisement in *Mill Supplies*, read by the dealers, would aim

to sell the product by mentioning the profit to be gained, the advantages to be obtained through the operation of selling the product.

Again, if the product is sold exclusively through the dealer it is well to make mention of the fact, because the dealer is partial to such a product. The appeal in the paper read by the dealer should be the sales help, the sales co-operation, the sales service that the manufacturer can give to him.

To use the word "lazy copy" again, it is indeed "lazy copy" where the advertising manager or copy writer of a technical product attempts to cover all applications with one or two standard advertisements. To do this is to follow a course that makes advertising a liability rather than an asset.

### COPY NEEDS STUDY

Advertising copy, whether the advertisement is a space in a magazine or a direct-mail piece, is the sales argument in printed form; to use a hackneyed expression it is the "printed salesman". It lacks the personality of the salesman and, of necessity, it has to share the platform with other speakers. It has longer life with the prospect than the personal appeal and it cannot be changed to meet every argument that may arise in the prospect's mind. Every word, every sentence, every paragraph in the printed sales appeal can be analyzed and studied. Because of these limitations greater study, and greater care and more thought must be put upon it than ever is given to the argument advanced by the salesman.

To illustrate, a salesman selling oil, when asked if it would gum might make the reply, "Gum? Why it will gum *beautifully*." By his manner, by his intonation, he would convey the thought that the oil would not gum, but imagine such a statement in an advertisement.

Every word of the advertising copy should be studied not only for the exact meaning of the word, but for what the word connotes. Every sentence and every paragraph

should be studied to see if the meaning, if the message, is just what the writer intended to say.

To repeat what has been said in a preceding paragraph, many an advertisement does not say what the writer thinks it does. One of the authors observed an advertisement a few days ago that distinctly stated that a certain manufacturer was selling shop trucks; and yet he knew full well that this manufacturer was not making and selling the truck as a unit but rather a part that might be used in the truck. This advertisement had all the ear marks of having been written while the messenger was waiting for the copy. There was space to fill, words would fill the space, and therefore so many words were tossed together. Copy that is going to show "net results" cannot be prepared in this manner.

A study of the advertising copy in any publication will justify the truth of the statement that much of it is waste; much of it is weak, anæmic, baneful. It is carelessly and thoughtlessly written.

The technical product in itself, its many applications, and new copy angles, always must be the study of the copy writer. And yet there are writers to-day preparing advertisements who never have seen that which they are writing of, much less understand clearly how it functions. They depend for their copy ideas on copy that has been written by others, and build their advertisements with the sole aid of the manufacturer's catalogue, a paste pot, and shears.

### DIRECT RESULTS

There is no question but that advertising must be made more productive of direct results. Quickly the day is coming when the alibi of "General Publicity", when offered to the man who pays the bills, is going to be as a red flag waved before a bull. And direct results cannot be shown by a copy writer whose sole inspiration is *pep* and *punch*, and whose every effort is marked by the one desire to make copy "snappy".

This unfortunate condition can be laid however more at the door of the manufacturer than at that of the advertising man or advertising agency. For what has been said as regards the manufacturer's permitting an advertising manager or agency to write copy based upon knowledge of the product gained from a review of a catalogue or a walk through the plant, applies to the composition of the copy. Many a manufacturer permits himself to be sold on copy that if read aloud to one of his prospects by one of his salesmen would result in the immediate dismissal of that representative. When the manufacturer shall come to regard his advertising department in the same light as his production department, and shall regard his advertising appropriations as an investment rather than as an expense, the day of the "pep" and "punch" and "snappy" copy writer will be a day that is gone.



**PART IV**  
**ADVERTISING ORGANIZATIONS**



## CHAPTER XVIII

### THE ADVERTISING DEPARTMENT

#### THE ADVERTISING MANAGER—THE ADVERTISING DEPARTMENT

##### THE ADVERTISING MANAGER

As the advertising of any product, of any manufacturer, interprets the product and the house to the public, to the advertising manager falls the work of the interpreter. His is a position of responsibility and a far deeper responsibility, moreover, than falls to many other department heads. The production manager may limit production by an insufficient balance between departments of the factory, but this trouble can be quickly rectified, and the hurt falls entirely within the four walls of the business. Careless inspection of the finished product may result in complaints but these come in quickly and before the damage to reputation is very great. The business might suffer for a limited time from mismanagement but quickly the fact would reveal itself and quickly it could be remedied.

The advertising manager, however, who incorrectly interprets not the material things of the business he serves, but rather the spirit of it, may do irreparable damage, irreparable because it would seep into the business unawares.

*His Training.*—What then should be his training? He should be an engineer that he may have an understanding of engineering principles as applied to his product; he should have sales experience that he may know sales problems and the market that he is to reach through the printed word. He should be a man of character with an appreciation of art and literature and somewhat of an idealist. He should have the ability to lead and direct and also the inherent desire to serve. For advertising is a tremendous



force that increases sales volume and greater than this, builds good will, and no man can put more into his work than what he is.

*His Duties.*—The duties of the advertising manager may be divided into two classes, those directly concerned with the work of the advertising department, and those concerned with the organization as a whole, for a feeling of good will on the part of the workers in the organization is fully as important as good will on the part of the outside world.

The work of the advertising manager within his department need not be discussed in detail. It is his duty here so to organize his department that proper investigations may be made upon which to base campaigns; to study the development of new markets and possible new uses for the product; to prepare or have prepared under his direction, all advertisements, bulletins, catalogues and direct-mail pieces.

An all-important duty connected with the advertising work is that of co-operation with the sales department. There is no doubt that advertising and sales men agree generally that there should be hearty co-operation between advertising and sales departments. Both groups are inclined to give this co-operation to each other with whole-hearted good will. But in the actual hustle and bustle of transacting the daily routine they both completely forget each other most of the time.

Mr. L. S. Hamilton of the National Tube Company says, "After a number of years of experience I have found one thing, namely, that the big thing in advertising isn't copy and it isn't style or type; neither is it printing or booklets or anything of that kind. The success or failure of any advertising department depends upon its ability to connect up with the sales idea."

The only insurance that can be provided for a complete *liaison* between the advertising and sales forces is an establishment by the sales and advertising managers of definite ways for carrying on this *liaison*.

Selling effort to be most economical must include both personal salesmanship and advertising, and the most effective use of these must be based on their complete co-ordination. In the case of the manufacturer whose capital is extremely limited it is better to restrict the marketing expense by concentration on a small territory or on a limited number of prospects rather than by using advertising without salesmanship or salesmanship without advertising.

The nature of the technical product demands a large element of personal salesmanship actually to close the order. This, however, does not depreciate the value of the advertising as a means of getting the prospect ready to close. It simply emphasizes the importance of effecting a complete co-ordination of the sales and advertising forces. There are two principal things to consider in this work of co-ordination: That the advertising and the salesmen say the same thing to a particular group of prospects; and that they say it about the same time.

One way of accomplishing co-operation between the sales and advertising departments is to offer a reward to the field men for advertising ideas. An offer of this kind accomplishes two results; it furnishes a certain amount of sales ammunition for the advertising department, and it also supplies an unconscious checking of the advertising already in use. Of course, when the sales engineer writes an advertisement he will be prompted to use the same argument in the advertisement, the same appeal, as he uses in his every day sales work. And after all this is what should be put into an advertisement. Moreover, running the contest helps sell the sales engineer on the advertising. It makes him more appreciative of just what the advertising is doing for him and also makes him more wide awake to look for the possibilities of advertising's helping him in his particular territory.

The constructive advertising manager can be of great assistance to the sales manager by helping keep up the morale of the sales field forces by means of informing them on all of the advertising plans, by editing for them a cheer-

ful, optimistic, sincere house organ, by the enthusiastic working out of "stunts" for the periodical sales and advertising department conventions.

In addition to this work of co-operating with the sales department there are duties in other departments with which the advertising manager should concern himself and while these are in other departments, all belong properly to the work of advertising, for it should be remembered that magazines and newspapers are not the only mediums.

By way of illustration there is the company's stationery, not only the letterheads, but invoices, checks and all forms properly coming under the heading. In addition to these there are the shipping labels, the books of instruction governing installation, and the package or box in which the goods are shipped. There comes to mind a company manufacturing a small mechanical appliance that is sold through hardware stores. This product is contained in small wooden boxes and the advertising manager for this company obtains a great amount of advertising by means of an attractive label, printed in two colors, which is placed on all four sides of the box. Again, signs on the factory buildings come within the jurisdiction of the advertising manager.

A further duty of the advertising manager is to spend a reasonable amount of time travelling with salesmen and visiting customers using the product, or dealers handling it. He may have on his staff a competent investigator or research man who spends a great amount of time in the field; but even so, if he is to keep his department abreast of the times, if he is to fit himself to counsel with the sales manager, he must know the customers, the product in all its applications, and the problems of the salesmen. Certainly the average advertising manager gets out into the field too little. He should not let a month go by without spending at least a few days out in the field to freshen his view point and to keep actually in touch with the factors that are really selling his company's goods. The advertising manager who locks himself in his little den and

knows nothing of what the business is doing, who does not scrutinize the daily or weekly sales sheet, who does not know the exact state of the trade in any given part of the country, and who does not talk with the salesmen when they are in the office to hear from them the stories that are told them by the trade—is not an advertising man at all; he is a sort of special clerk, whose work ranks with that of the book-keeper or stenographer.

*Other Duties.*—In this period of reconstruction the subject of labor and capital is the all consuming topic. It is not the purpose here to enter upon any discussion of this subject for such would not be consistent with the motif of this book, but rather, to give it consideration only to the extent that is necessary to emphasize the advertising manager's relation to it.

The words "welfare work" have been much abused. Much that has been done along this line has been a loss in time and money and energy because of lack of understanding of fundamental principles; the fundamentals of right and wrong. Only a few days ago, one of the authors in discussing this subject with one who is exceptionally well informed upon the subject both by training and study of present day conditions, was told, that to increase production, the world need of the present day, new equipment was not needed but rather a new spirit on the part of the employer and this a spirit of honesty in dealings with employees. Playgrounds for employees, rest rooms, various forms of entertainment, bonus systems and all that has been attached to the words "welfare work" are well and good but fall short of their function unless prompted by the spirit of honesty and fair dealing and unless stamped with the personality of the governing factor behind the organization. The man at the bench is human in every way; he works that he may live, he has those whom he loves just as the man who carries the title of president or general manager. And to the degree that he is treated as a human being, to the degree that there is an understanding between employee and employer, will labor

questions become less of a problem. It would be difficult, however, in many organizations because of the great number of employees, for the controlling factor, the president or general manager, to establish this feeling of unity and it is here that the advertising manager, again in the capacity of interpreter, can serve his organization truly and well.

And this work falls properly to the advertising manager because he is the idealist of the organization; it is his duty to reflect the ideals of the organization, to the workmen as well as to the buying public; and if necessary, to inculcate an ideal, a spirit of fairness and honesty in every department from the executive offices down.

This work falls to the advertising manager because it is a work of constructive propaganda; it is missionary work of the highest order, that can be done only by one who has an understanding of human nature, of psychology, and withal one who has the ability to place on paper the message that he feels in his heart.

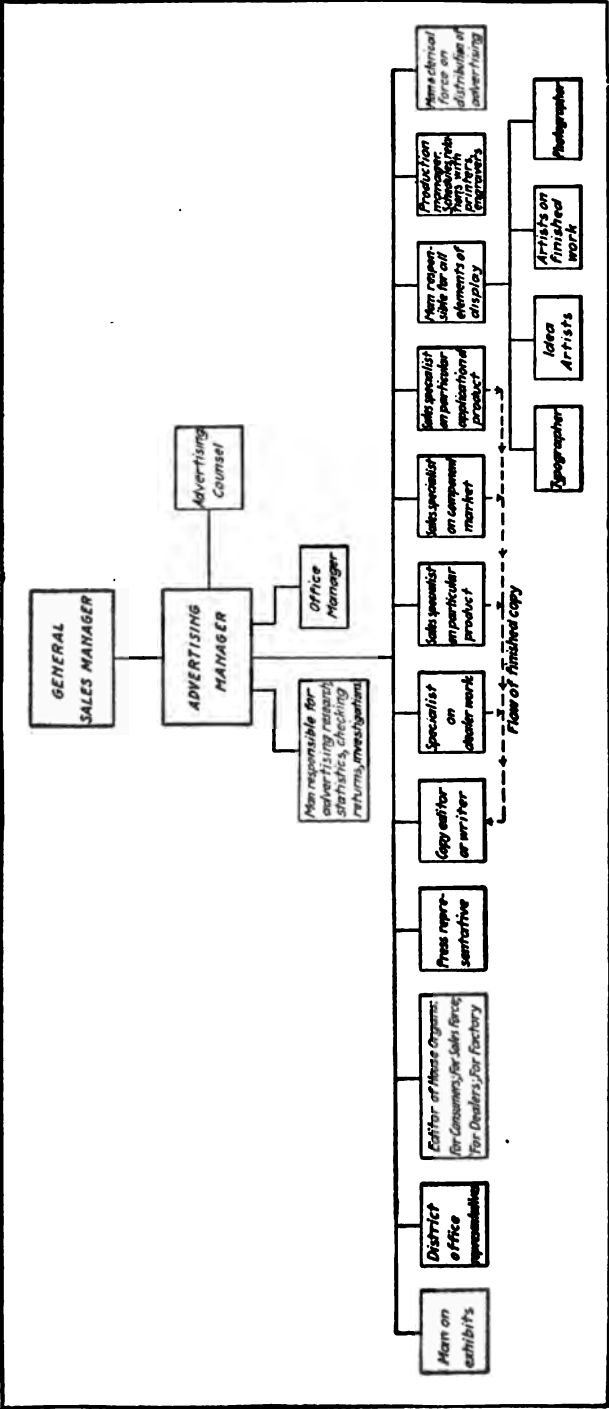
There are many mediums for this message. Probably the first is a shop newspaper; edited to report the news of the organization as a country newspaper reports the news of the countryside, while the editorial columns, and an occasional inspirational story clearly and sincerely written, can convey the bigger message. Placards and posters placed about the shops, printed slips in the pay envelopes, are two additional mediums, while a study of the subject as it concerns one definite organization and one definite object, will suggest many. The spirit of these messages, however, the spirit of unity, of good will must be reflected by the man who would write them or else but little can be accomplished. Welfare work as it is instituted to-day accomplishes but little because, first, it is placed in the hands of a professional worker; second, it carries all the ear-marks of charity; third, it lacks the personality of the governing factor; and fourth, the motive for it is not one of service to fellow man, but rather one of increase of profits. Let the dominating thought be the fundamentals of justice,

of honesty, of unity, let this thought radiate from not only the advertising manager but all within the organization and welfare work as it is conceived to-day will accomplish more constructive results. And the advertising manager who would serve in a great way can do no better than devote himself to this work.

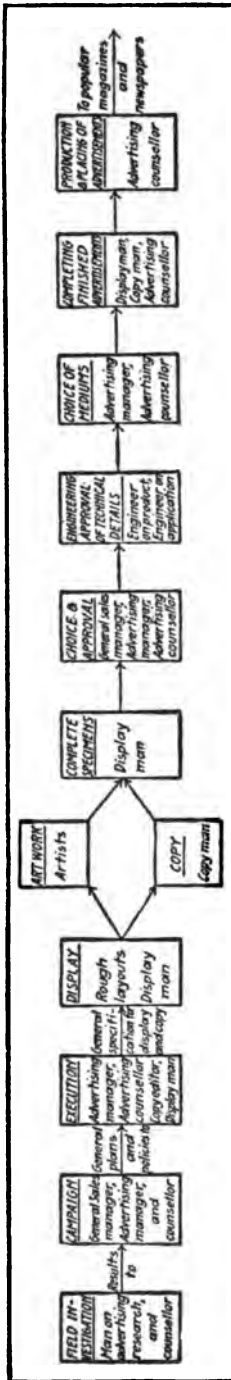
### THE ADVERTISING DEPARTMENT

*Organization.*—The accompanying organization chart represents some practice that is pretty well standardized in advertising departments connected with the distribution of technical products, and also presents a few features that the authors feel could modify present general organization practice to good advantage. There has existed a tendency among advertising organizations generally to make the functions of each man's position include a well defined group of factors that are peculiar to the business of publishing. This is necessary, of course, for practical reasons, but the organization could be greatly strengthened and very much more effective use could be made of all the advertising mediums by adding to the organization a few positions that would include functions peculiar to the sale of the product in the respective component markets.

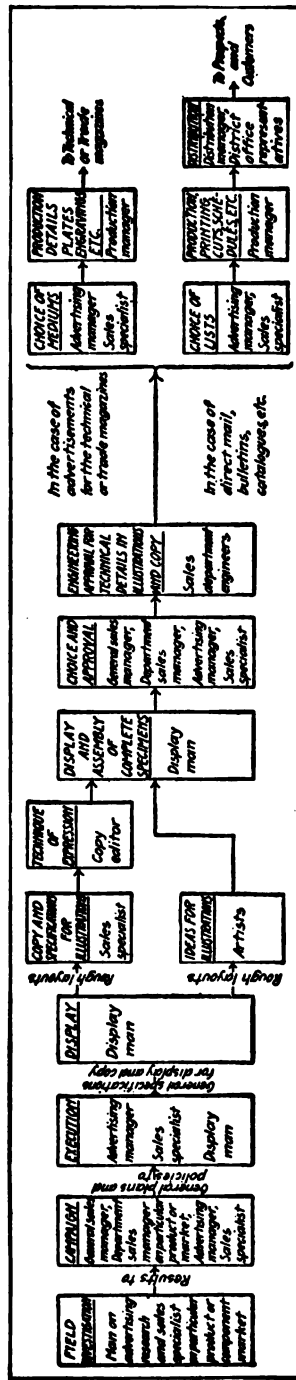
For the want of a better term, these positions are filled in the chart shown by men called "Sales Specialists". The sales specialist should work hand in hand with the division sales manager whose advertising he is handling and should make frequent trips into the field to get advertising ammunition from the sales engineers of the division and their customers. The sales substance for the advertisements should be accumulated by these specialists and they should put the advertisements in rough form and write the copy. This rough form should go to the display man, who could express his art in giving the advertisement form. The copy editor could go over all of the copy written by all of the specialists to fill it with the advantage of correct expression. The specialist would "sit in" on all



Suggestions for the organisation of the department advertising technical products. Chart shows lines of authority and responsibility.



In the case of advertising in the popular magazines and newspapers, this chart shows the flow of ideas through the various steps in their crystallisation into advertisements. The flow shown is based on the functioning of a department organised according to the chart shown on the opposite page.



In the case of advertising in the technical and trade magazines, and in the case of direct mail, bulletins, catalogues, etc., this chart shows the flow of ideas through the various steps in their crystallisation into advertisements and sales literature. This flow also is based on the functioning of a department organised according to the chart shown on the opposite page.



conferences governing the choices of mediums for campaigns on his products and their component markets.

The advertising manager should report to the general sales manager.

There should be on the staff of the advertising manager a research man, who would engage himself in the study of all economic factors bearing on the efficiency of the advertising and the work of the department. He would gather vital statistics, supervise field investigations, establish means of checking advertising returns, and conduct experiments to define the psycho-economic factors of the company's advertising problems.

There should be at each important district office a representative of the advertising department, who can insure a complete *liaison* of the advertising with the sales forces in the field.

*The Spirit of the Department.*—If not carefully watched, the spirit of the advertising department, due to the fact that its work differs from other departments more than these differ from one another, is likely to become one of isolation; it is likely to regard itself as a department unto itself rather than one of many departments all working toward one common end. As the advertising manager should report to the sales manager, at least on that part of his work that bears directly upon sales, so should the spirit of the advertising department be one of selling, and the motive behind every advertisement prepared, every piece of direct-mail matter written, should be one of securing orders or building business.

While this suggestion may be considered as banal and primary, it is a fact, nevertheless, that in many publications there appear advertisements that reflect no thought of securing orders but rather serve only as a means of exhibiting some form of art work, or some form of phraseology that the writer regards as clever. In company with an advertising man some few weeks ago, one of the authors saw him make note of a word in his note book. Upon being questioned the advertising man said that the word was a

new one to him, and he thought that it would sound well in some of his advertising—hence the note of it. The authors have no doubt but that, before the day had done, an advertisement had been prepared in order that the new word might be used.

*Great Potential Forces.*—The advertising department as a department can make itself felt as a great force in the business; a force of high potentiality to make of the business a bigger, better business. But as no man can put into his work more than what he is, the advertising manager must be an analyst, a man of vision, a man of imagination, a man of culture and withal one who has an understanding of human nature. He must be a lover of truth, not because it is the best policy, but because it is truth.

It is within the power of the advertising department to help materially to increase sales, and more than this, to inculcate in the minds of every one in the organization a spirit of honesty, of fairness. It is within the power of the department to build a vast amount of good will on the part of the workers toward the organization, and on the part of the public toward the product.

To the advertising manager who would make the most of his position there is afforded a great opportunity to serve, a great opportunity to lead his company, his organization always to greater achievement.

## CHAPTER XIX

### ADVERTISING COUNSEL

The advertising agency—The publisher's service department—  
The technical agency—The general counsel.

For the manufacturer who does not operate his own advertising department or whose department desires assistance in the handling of the campaign as a unit or any part of it, there are many classes of what may be termed advertising counsel.

### THE ADVERTISING AGENCY

The advertising agency is perhaps the best known of these. The term "agency" is not the proper word to describe the functions of the general advertising agency as it is known to-day. The term originated when men made contracts with one or more newspapers to serve as their sole representative in a given city or territory. Quickly however, with the development of advertising, these agencies gave up the plan of sole representation for certain papers and acted as agents for all publications, but they retained the name "agency". To-day the agency serving as did the original agency, is known as a "special agency".

To define the services rendered by the advertising agency of to-day is difficult, as it would be difficult to define the services rendered by a doctor or a lawyer. It might be said broadly that the services of the doctor are to help a patient to regain health and of the lawyer to defend a client's case at court; and that of an advertising agency to help a manufacturer sell goods. But such definitions would not be complete unless consideration were given to the scope of the service rendered. Thus the doctor might be a con-

sultant only, and the lawyer a trial lawyer only. Again, the doctor might serve as a specialist or operating surgeon and the lawyer serve exclusively as a corporation advisor. The service, the help given by the agency for the sale of goods, depends wholly upon the agency, and the authors doubt if any two operate exactly alike. Thus one agency may concern itself only with the placing of the advertisements in magazines or newspapers, the advertisements being prepared wholly within the manufacturer's advertising department; another may both prepare and place the advertisements but not concern itself with direct-mail advertising; a third may take care of all advertising work; while a fourth may go further and not only take care of all advertising work, but render suggestions as to the management of the sales department, and co-operate with the factory division on problems of labor.

The usual service rendered by the average agency, is to co-operate with the client in the preparation of advertisements, to recommend a list of magazines or papers in which the advertisements are to appear, to order all necessary engravings, and to place the advertisements.

The agency receives its compensation for this work, not from the client but rather from the magazine or newspaper and the rate of compensation is on the average fifteen per cent. And because this compensation is paid by the publisher rather than the client to whom the service is rendered, because it is an illogical arrangement, the question of agency compensation is a much debated one. The argument is advanced that if a manufacturer were to erect a new building to cost \$100,000, and had no purchasing agent, he would not accept the services of one who received his wage from the building contractors or the suppliers of brick and steel. Is it any more logical to place the expenditure of \$100,000 in the hands of an advertising agency when it is to receive its compensation from the publisher, the supplier of space?

The publisher justifies this system of compensation by the argument that the agency is the publisher's representa-

tive; that the agency creates new advertising. This argument is well in theory but the fallacy of it lies in the fact that a comparatively small percentage of new business is created by the agencies. If the argument advanced by the publisher were true, then why do all publishers maintain such elaborate and expensive sales departments? Again, if the agency is the representative of the publisher, then a proper procedure for the agency would be to lay before its hundreds of employees, the publishers, all details of a new account, and to discuss with them how the appropriation should be divided.

On the other hand, if an agency renders the conscientious service that it should, if it makes the trade and market investigations that it talks about, fifteen per cent. of the advertising appropriation is not an adequate compensation. Indeed, there are many agencies, to-day, that are doing a great constructive work in advertising, that are serving their clients in a big, broad way, whose net charge is far in excess of fifteen per cent.

It may be stated generally that in advertising as in everything else, if efficient, comprehensive service is to be rendered adequate compensation must be paid. Modern practice tends to charge a pre-arranged retainer fee and to credit against this, commissions received from publications. The advertising agent of the future will operate in relation with his client much as a lawyer does; he will be retained because of his professional experience and knowledge and his compensation will be in the nature of a retainer or salary. The publications of the future will have one rate, the same rate to advertising agent and to advertiser. Thus, the agents that have attained to efficiency by a thorough study of the art and science of their work, will receive just and proper compensation, while the charlatan will fall by the way.

The modern agency should be equipped to assist a client in the solution of sales problems, in sales policies, in sales department organization and management, in advertising work in all its phases, popular magazine, tech-

nical magazine, newspaper, bill board and direct-mail, in any problems related to morale or in any plans for future development of the business.

*The Publisher's Service Department.*—Many publishers operate what is termed a service department, which, without charge, renders assistance to their advertisers. A description of the organization and work of such a department will be found in Chapter XX.

*The Technical Agency.*—Differing from the general agency is the technical or service agency, which makes a specialty of technical and semi-technical accounts. As the trade or class papers do not pay commissions, these agencies receive their compensation in the form of a retainer or salary and in many cases are entered upon the manufacturer's payroll and regarded in every way as an employee, or as the manufacturer's advertising department.

Probably to Ray D. Lillibridge, New York, belongs the credit of having started the first technical agency. Some years ago Mr. Lillibridge conceived the idea of serving on a part-time basis manufacturers of mechanical products whose advertising problems were acute and yet whose appropriations did not warrant the employment of an advertising manager. The idea found ready acceptance, and, with the rapid growth of technical advertising, Mr. Lillibridge quickly gathered about him a staff of men trained along technical-advertising lines.

The work of the technical agency parallels to a degree the work of the general advertising agency, with the exception of the matter of compensation and the fact that usually the technical agency handles all the advertising work and is, often, in fact, the manufacturer's advertising department. This work includes the preparation and placing of trade and technical paper advertisements, the preparation of direct-mail pieces, and the preparation of bulletin and catalogue manuscripts, and of course, the supervision of all mechanical production. The technical agencies are doing splendid work.

*The General Counsel.*—In addition to the agencies with organizations prepared to handle a manufacturer's advertising either wholly or in part, there are men who are specialists and with whom the manufacturer may consult upon problems of sales, advertising, copy, direct-mail advertising, circular letters, typography, illustrations.

These specialists operate upon a retainer or fee basis and do not concern themselves with the mechanical production of the work or the placing of any advertisements. Rather they bring to the manufacturer a highly specialized knowledge upon their subjects. They do not in any way duplicate the work of the agency, but rather supplement it. There are a few national agencies who have such men on their staffs, but usually these men are associates of the agencies, and have in addition other clients.

## CHAPTER XX

### THE PUBLISHER'S SERVICE DEPARTMENT

**An organization principle—The methods of early days—"Ad-writing departments"—The service department—A typical example—Field photo service—Publisher's advice to the advertiser.**

#### AN ORGANIZATION PRINCIPLE

At the risk of a cry from the gallery of "propaganda", or "press agent", the authors are presenting here a description of a publisher's service department. This department has been studied by the authors, and they can report sincerely that in these days when so much service is advertised that is not conscientiously backed up, it was refreshing to find a well organized group of men who know just what they are doing and who are doing it thoroughly.

The organization of the service staff and the execution of the work are carried out with a full recognition of a principle in advertising that is paid little attention to in the organization of advertising departments in general, the principle of specializing on market groups instead of entirely on the functions of preparing advertisements. This service department has taken an important step in the direction of correct organization, a step that results in the elimination of the wasteful use of good space for generalized appeals of low sales energy. And if the story on the publisher's service department drives in this one important organization point, the authors will feel that the risk of the previously mentioned cry from the gallery was well worth taking.

#### THE METHODS OF EARLY DAYS

Advertising the technical product, from the publisher's standpoint is a matter that did not concern technical



publishers to any great extent fifteen or twenty years ago. In the early days of technical advertising, publishers were content to sell space merely as space under old time methods of solicitation, and the copy was not seriously considered. In those early days, advertisements in technical papers were mere cards. There was no attempt to get any reasonable copy, and changes of copy were very rare. It was the practice to run plates until they were worn out on the press, and then to order new plates of the same advertisement. As a result, the pages of technical magazines looked like grave-yards displaying so many tomb-stones.

About twenty years ago there began to originate a change in this condition. The change at the time was very slight and its influence did not amount to much. Some of the technical publishers, particularly John A. Hill and James H. McGraw, became dissatisfied with the lack of appreciation on the part of technical advertisers that good copy was essential in producing business for them. An attempt was made about this time to induce some of these technical advertisers to change their copy and to get away from the practice of running the same little card over and over. Advertising Service Departments, as they are organized to-day, were unknown and undreamed of. In some cases it was the publisher himself who took his hand at writing a few "ads", and pleading with some of these old technical advertisers to allow changes of copy to appear.

The plan got on rapidly and these early efforts in producing copy, crude as they were and lacking the skillful handling of to-day, stood out in the advertising pages by contrast. They were not examples of good advertising as we know it at present, but they were sufficiently strong by contrast with the old tomb-stones to attract attention on the part of the readers. As a result of this attention advertisers began to notice perceptible results over what their standing cards pulled. In consequence there came a demand, slow at first, upon technical paper publishers to render some sort of copy service. And in this manner the idea of service departments was born.

### "AD-WRITING DEPARTMENTS"

Now in those early days technical publishers had no organizations to meet this demand and the organizations had to be created. The organization began, in most cases, by engaging one or two copy writers, as they were called, to prepare copy. These writers wrote their own advertisements and made their own layouts. It was exceptional to have any art work in an advertisement and it was therefore possible to submit to advertisers suggestions that later generations would look upon with more or less compassion. These little mushroom attempts were called "ad-writing departments", and publishers looked upon them as a more or less necessary evil, as they began to realize that in order to maintain them they had to pay copy writers salaries.

It became apparent, however, that the work that these little one-horse ad-writing departments accomplished was resulting in more business from the field, and better results for advertisers. Before the days of copy preparation, advertising solicitors were forced to use the one argument, circulation, and the majority of contracts were secured not because the advertiser expected to get anything out of them but because he knew the solicitor and perhaps gave him a contract because he wanted to get rid of him. The preparation of copy changed all this and technical publishers began to realize that in copy preparation they had another right arm for the solicitor.

From this time on it was chiefly a matter of educating advertisers to the fact that space is only space and that when they signed a contract they purchased only so much blank, white space bound by four rules. Space in itself, these advertisers began to realize, was of no value unless they were able to put something in that space worth while, and it began to be the job of these little ad-writing departments to extend their scope and to show and educate these technical advertisers how they could best use this space. While technical publishers were educating advertisers along these lines, they educated themselves, and they began to find

out new possibilities which had been undreamed of in the earlier days.

### THE SERVICE DEPARTMENT

The next step from the ad-writing department was the "service department". The word "service" came into the field because it typified something that the publisher was rendering to his advertisers.

As the ad-writing, or "service departments", as we can now call them, grew, the art end of technical advertising grew also, because it was appreciated very quickly that art plays an important part in technical advertising and should go hand in hand with the writing of copy. For a while the demands of service departments ran to heavy border stunts. All sorts of weird and fantastic borders were used about fifteen years ago in the belief that they would attract attention to the advertisement. As a matter of fact, in the majority of cases, these heavy borders attracted attention to themselves rather than to the product advertised. This was one of the things that service departments themselves had to find out and correct. Fortunately for the field of technical advertising, the service department left these border stunts far behind and advanced along the lines of good, straight, reason-why copy, plus excellent art treatment.

Advertising Service Departments to-day are organized along general advertising agency lines as regards their facility for handling any advertising problem that they may have to assist in solving. It was found, as this service department idea began to assume more importance in the minds of technical publishers, and as technical advertisers were using it more, that the old style "ad writer", with his clever, snappy head lines, was not strong enough to carry the responsibility. Service departments, therefore, began to secure recruits from the various engineering fields covered by their papers and took on technical men who could write and plan about technical products with knowledge of what they were talking about.

## A TYPICAL EXAMPLE

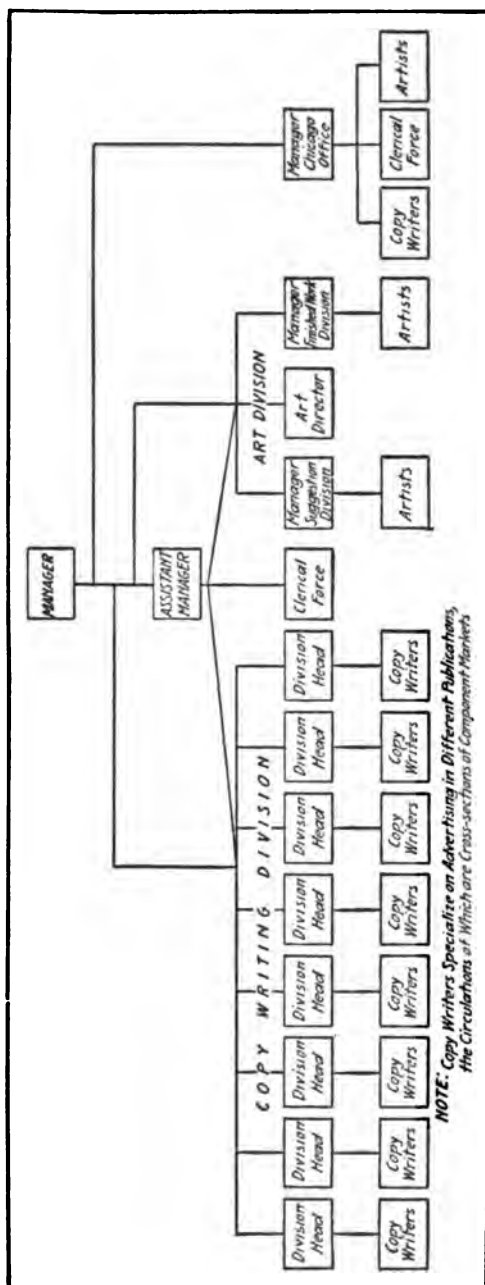
As a typical example of the organization of the Advertising Service Department of to-day, we can consider the Advertising Service Department of the McGraw-Hill Company. This department consists of seventy-five people. Its general plan of organization is as follows:

The problem is to serve eleven magazines, covering eleven different fields. What is known as the group division idea is in active operation in this department. The advertising writing section is divided into various groups, in which are placed men who are chosen particularly for their practical engineering knowledge in the field to which they are to write. Another class of men is also chosen, namely the trained, experienced advertising man who may or may not have had a technical or engineering training. Each group of advertising writers is presided over by one man who is termed the Division Head, and on his shoulders rests the responsibility of copy preparation in his particular group.

As a result of this policy of "staggering" men, the two classes learn from each other. The technical, engineering man soon absorbs from the practical advertising writer the principles of advertising and learns of their application. The advertising man in turn learns from the technical man regarding the engineering features of the products advertised. And as a result each becomes in time a trained technical advertising man. This policy is carried out in the various Group Divisions and the result is that the copy writing end of the Advertising Service Department is well balanced. It has the engineering slant and the advertising slant as well.

The Division Heads report to the Manager of the Department, and the manager is able to reach his men through them.

The Art Department is not divided according to groups, but serves the entire advertising writing section. It is the policy, however, to try to secure artists who have a



**The organisation of the publisher's service department.**

mechanical turn of mind or a mechanical training. This is particularly true in the case of retouchers. These retouchers possess the ability to read blue prints as easily as type. Incidentally, artists are chosen for their particular ability in some one line of art. As the department is so large and so many papers are served a wide range of art treatment comes to the Service Department to be handled. Artists grade all the way from letterers to artists of the highest calibre. The art department's organization is divided according to two classes of work, the advertising suggestions, which go out to the advertiser, and the preparation of the finished drawings when suggestions are approved. Each class of work is under the supervision and charge of an art manager, who is responsible for execution and production. There are also staff artists who can be used promiscuously for either the rough suggestions or the finished work. The work of the entire art department is under the general supervision of an art director.

As a result of this scheme of organization among copy writers and artists, a flexibility is secured that is very desirable and helpful not only to the publisher but to the advertiser. If one particular division in the copy writing section is over-crowded, it is possible to enlist the temporary services of some other division, which perhaps has not quite so much to do.

#### FIELD PHOTO SERVICE

As a part of the Advertising Service Department, what is called the Field Photo Service Department should come in for consideration. This branch of advertising service also is the result of the developments outlined previously.

There was a time not so very many years ago when technical publishers were dependent entirely upon the advertisers for cuts and illustrations showing machines and installations. In order to secure new material for advertisers the idea was started in a small way among some technical publishers of sending photographers out on the road with cameras to take pictures in shops and in the field.

The idea grew rapidly and these traveling men, used by service departments of to-day, are not only photographers but reporters, on the firing line to dig up original stories of actual accomplishments in shop and field and to get the pictures.

Such a department is maintained by the McGraw-Hill Company as a part of their service. This department has also a collection of prints to which it is constantly adding. These prints embrace practically every sort of installation in the technical field and are properly classified and indexed. It is possible, therefore, for the technical advertiser, who expresses a desire for a certain type picture, to draw upon this photographic file. If the picture he wants is not in the file, the department secures it either through its own traveling men or through over seven hundred photographic representatives scattered throughout the country and abroad.

#### PUBLISHER'S ADVICE TO THE ADVERTISER

Advertising the technical product through advertising service department work and co-operation has come to be a thing much sought after by advertisers in all fields. It is possible for technical advertisers to receive from service departments complete sales plans, campaigns, analyses of trade conditions, and advertising suggestions in any quantity, submitted to them for their approval. Also, it is possible for these same technical advertisers to secure the close co-operation of the technical advertising writer in the service department who is the contact man on the case. The advertising service man is looked upon to-day as the confidential advertising advisor of the technical advertiser. This service man is usually available at call for conferences with his advertisers and he works with them in a way that is as different from the old "ad-writing" idea as daylight from darkness.

The technical advertiser who contemplates starting an advertising campaign is urged by the publisher's service department to consider the necessity for a number of things

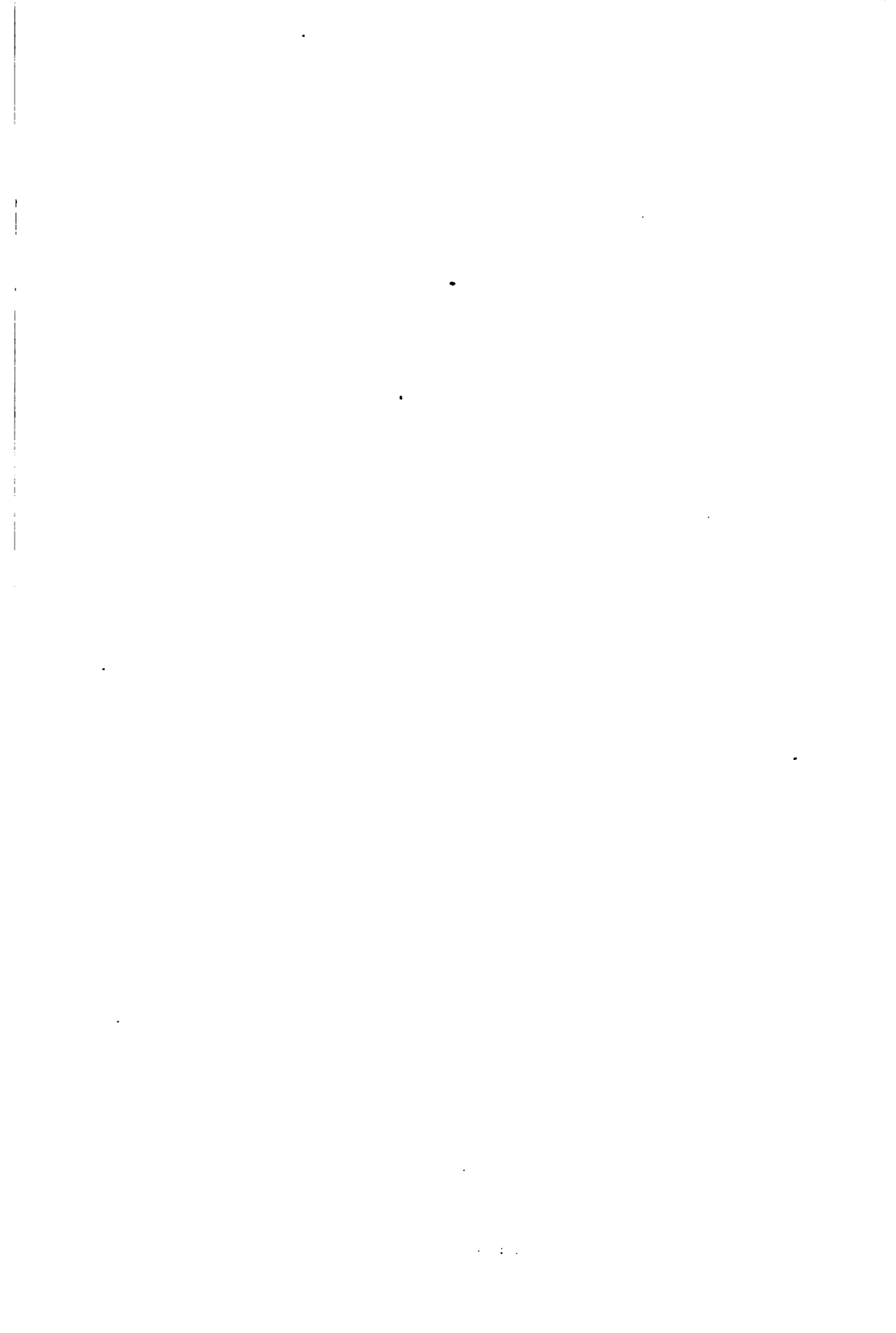
In the first place he must advertise with a plan. He must advertise certain specific products. He must advertise them in a way to fulfill the four fundamental steps of attention, interest, desire, and action. He must advertise with an appreciation expressed in his copy of a knowledge of the field that he is reaching. He must advertise in the language of this field. His copy should fit his particular proposition whether it be mail order or general publicity. His art treatment should dovetail with what he desires his advertising to accomplish. His advertising should have behind it, in its preparation, the evidence that the man who is writing it not only knows what he is talking about but knows the people to whom he is talking.

All these requirements can be found in the modern advertising service department properly organized and maintained to render this sort of service. It is a long jump from the little "ad-writing department" of past years to the modern, well organized and equipped advertising service department of the present, which is strengthened in every detail to give to the advertiser the sort of advertising copy he needs to make his advertising pay. And if it pays him it will pay the publisher. After all, advertising service departments are merely one expression of how the technical publishers of to-day are serving their field.





**PART V**  
**APPENDIX**



## CHAPTER XXI

### DEALER CO-OPERATION

Considerations governing dealer distribution—Sincere co-operation needed—Selling the dealer—Selling the dealer's salesmen—Helping the dealer cultivate his territory—Golden rule works well in manufacturer and dealer relation.

The manufacturer can distribute his products by any one of the three following methods:

1. By means of his own sales engineers.
2. Through dealers or sales agents.
3. By means of a combination of his own sales engineers and dealers.

### CONSIDERATIONS GOVERNING DEALER DISTRIBUTION

The manufacturer's use of dealer distribution will be governed by the following considerations:

1. The amount of capital he has available for sales and advertising work.
2. The prospective sales volume in any locality to be worked as a unit of sales territory; this unit is comparable to a dealer center and the territory contiguous to it.
3. The distribution of prospects in the territory; that is, are they concentrated at a few points or are they widely scattered throughout the territory?
4. The degree to which the product is technical.
5. The degree to which the product is a specialty.
6. The buying habits of the consumers or prospective consumers of the product.
7. Quantities in which the product is bought.
8. Amount of average individual purchase.
9. Number of consumers.

### SINCERE CO-OPERATION NEEDED

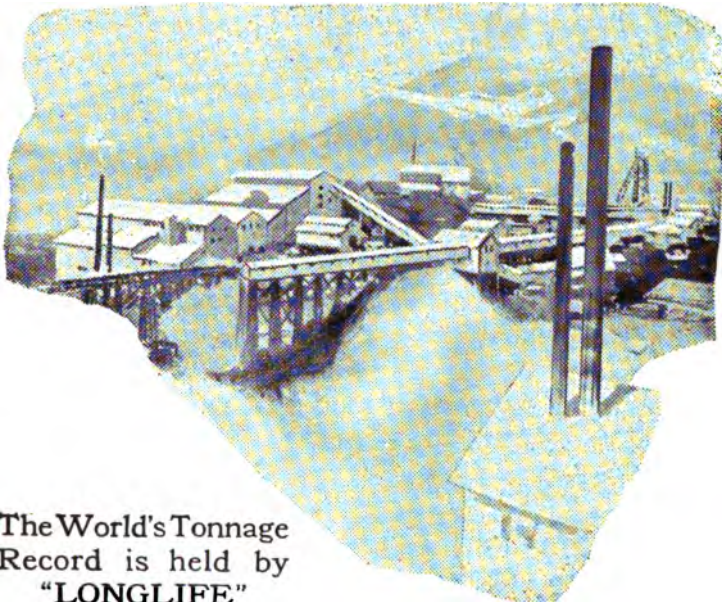
If the manufacturer includes the dealer as a link in his sales and distribution chain, the strength of this link will depend upon how conscientiously the manufacturer carries out his sales and advertising co-operation with the dealer. Products delivered to a dealer on a stock order are not really sold until he has re-sold them to consumers. It is one thing for a manufacturer to get a dealer to handle his line, and another thing for a manufacturer to put into effect the co-operation with the dealer that will insure the line's being actually well sold in the dealer's territory. The manufacturer should take steps to make the dealer an integral part of his own sales system, in so far as their relations based on the manufacturer's line are concerned.

Every month, the manufacturer should send a folder to every one of his dealers containing the advance proofs of the advertisements he plans running during the coming month in the popular, technical, and trade magazines. He should write the dealer a letter at the same time informing him on the sales plans and point out to him the consumer acceptance that is being created for the product.

The manufacturer should show the dealer how to couple his local advertising in the form of newspaper advertisements, bill boards, direct mail pieces, and window displays with the manufacturers' national advertising in the popular, trade, and technical magazines.

### SELLING THE DEALER

The manufacturer should advertise his product in a trade paper going to the class of dealers he wants. And when he advertises to dealers, he should present to them the business elements in which they are interested. The technical features of the product are relatively unimportant. The dealer is interested in profit and turn-over. The quality of the product has an incidental interest for him because it has a relation to the permanence of his profits. But



The World's Tonnage  
Record is held by  
"LONGLIFE"

A Goodrich "LONGLIFE" Conveyor Belt installed in a Utah Copper Mine in the Spring of 1914 carried 7,313,400 tons of ore during a period of four years at a cost of less than *twenty cents per thousand tons*.

Never—to Goodrich's knowledge—has this achievement been approached, let alone equalled.

Further comment seems superfluous in the face of such mighty testimony.

Why not dictate a letter to Goodrich asking them to send you their Belting Catalogue? Surely it will have an economic message for you.

THE B. F. GOODRICH RUBBER COMPANY  
Akron, Ohio

**Goodrich**  
**"Longlife"**  
**Conveyor Belts**

FOUNDED IN 1869



An advertisement that appeared in a mill supply dealers' magazine. Almost 100 per cent. waste. Mill supply dealers do not handle conveyor belts; a tonnage record in a copper mine means nothing to a dealer.

his main interest lies in the money-making possibilities of the product and the proposition.

A review of the advertising pages of the trade magazines going to dealers, mill supply houses, and manufacturers' agents shows that a surprisingly large number of manufacturers seem absolutely blind to the fact that the dealer is interested first in the business elements of the manufacturer's proposition and second in the quality and operating characteristics of his product.

When the manufacturer runs a campaign for dealer connections, his advertising in the trade papers should be coupled with the liberal use of direct mail to prospective dealers, such as broadsides, booklets, folders, letters, prospectuses. The appeals in these should be governed by the same considerations as apply in the trade paper advertising.

#### SELLING THE DEALER'S SALESMEN

The problem of making the *dealer* an integral part of the manufacturer's distributing organization really resolves itself into the problem of making the *dealer's salesman* a part of the manufacturer's organization. The dealer may *buy* the manufacturer's line, but it must be *sold* by his salesmen.

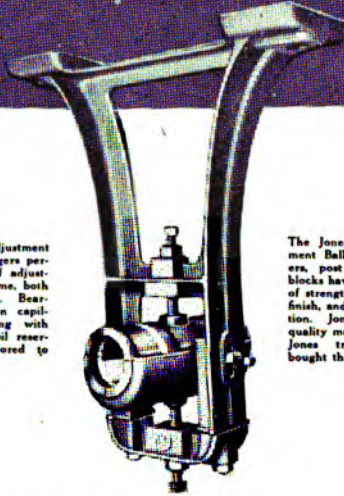
The printed word can be used very directly in several ways to make the dealer's salesman an effective sales promotion unit in the manufacturer's system of distribution:

1. By acquainting him with the house, its personnel, and its product.
2. By instructing him on the product, so that he can present it intelligently to the prospects in his territory.
3. By instructing him on the best ways of selling the product.
4. By showing him where and how to look for his prospects.

*An Example of Effective Co-operation.*—A manufacturer accomplished these several purposes very effectively as follows:

He secured and kept up to date, a complete list of the

Jones Universal Adjustment Ball and Socket hangers permit a wide range of adjustment, within the frame, both lateral and vertical. Bearings are combination capillary and ring oiling with exceptionally large oil reservoirs. Babbitted, bored to size, and ends faced.



The Jones Universal Adjustment Ball and Socket hangers, post boxes and pillow blocks have no equal in points of strength, beauty of design, finish, and efficiency in operation. Jones products are all quality made. When you buy Jones transmission you've bought the best.

## **Jones Helps You Sell**

**Merely stocking up doesn't get you far**

Not content with furnishing dealers the most nearly perfect transmission manufactured anywhere, we help you develop every possible lead to its utmost. We actually help your salesmen close business. We actually create new business for you and help you keep it sold.

Jones co-operative selling and intensive advertising forms the most important single factor yet contributed by any transmission manufacturer to the interests of its dealers.

*write for complete details*

### **W.A. Jones Foundry & Machine Co.**

4411 West Roosevelt Road, CHICAGO, ILLINOIS

An advertisement to dealers. The right appeal; good display.



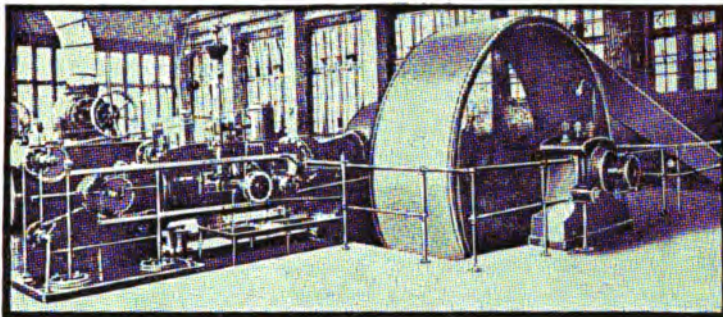
salesmen (some 350, in all) of his dealers and their home addresses. He informed them on his sales plans by writing them friendly (but not mushy) letters from time to time. He published for them a monthly house organ containing stories of sales philosophy and news of the various salesmen (the dealers' salesmen). He sent them advance proofs of advertising. So much for the warming.

To instruct them in his line he established a bulletin system covering his line. One bulletin was sent out at a time. This bulletin contained a plain, every-day English, description of his product with the technical sting taken out. Data, service costs, and all the various forms of sales information of this kind were put into the dealers' salesmens' hands at a rate that made it possible for them easily to absorb it.

Books of photographs were made showing details of the product, and actual installations of the product in the plants of big users. These books were not sent out broadcast, because they were too expensive, but they were presented to the field as being available for use; then whenever any salesman seemed really to be sold on using the book he was sent one for his own personal use. Before the book left the advertising department the salesman's name was printed in gold letters on the outside of the leather cover of the photograph book.

The salesman was told in bulletins the best methods of selling the product, and was told where and how to look for his prospects.

Finally, an instruction pamphlet was published for the dealers' salesmen. This contained well illustrated descriptions of the manufacturer's product, its construction, installation, and operation. The most effective sales points were crystallized in such form as to make them easily understood by the salesman and ready for quick use. Suggestions were made for the best methods of approaching the different buying powers at a plant. The dealer's salesman may work almost exclusively with the purchasing agent and in the case of the present product, the purchasing



WHEN you're thinking about the cost of a belt, think also about the cost of a break-down on the drive that belt is intended for. If the price that is a little higher for the belt that is a little better, buys you security against one break-down — wouldn't that little price difference be a mighty good investment? Ladew Leather Belts are not indestructible — but they do have a tremendous reserve of resistance not found in belts less carefully, less conscientiously, built. And—Ladew engineers are always ready to recommend the right belt for each of your drives. You have only to ask.

**EDW. R. LADEW Co., Inc.**  
GLEN COVE, NEW YORK, U.S.A.

*Since 1835*

Branches and Distributors in all Principal  
Cities of the World carry Complete Stocks.  
See your Phone Book for Local Address.

# Ladew

An advertisement to dealers. "Old stuff", with not an ounce  
of appeal to the dealer.

agent seldom had the power to specify and purchase the equipment; it was necessary to interest the men actually operating the plant.

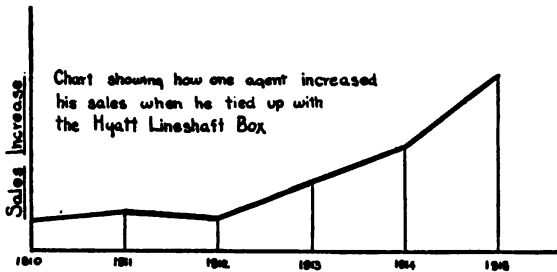
### HELPING THE DEALER CULTIVATE HIS TERRITORY

The manufacturer's advertising department can help the dealer by assisting him to cultivate his territory intensively by advertising. The manufacturer can furnish the copy and illustrations or cuts for the dealer's newspaper advertising or for the dealer's direct mail pieces. Frequently, the manufacturer prepares the direct mail pieces himself. The dealer's imprint is put on all pieces going into his territory. Form letters can be prepared by the manufacturer and sent to the dealer's prospects over the dealer's signature.

The dealer should be encouraged, of course, to keep a complete list of prospects in his territory covering the various lines he handles and classified according to these lines. The list should be kept up to date and all dead names weeded out from time to time. A check against a large waste factor in the dealer's list can be provided by having him pay the postage on all direct mail prepared for mailing in his territory.

The scheme of putting the dealer's mailing lists on addressograph plates kept in the manufacturer's advertising department is very convenient, because, when a change of dealers is made, a card index of prospects for the new dealer can be run right off from these plates.

One way of insuring the use by the dealer of the booklets, folders, blotters, etc. sent him to be sent out over his lists, to be used as envelope stuffers, etc., is to give his imprint plenty of prominence on the various pieces. The dealer naturally is interested not only in helping the manufacturer to convince prospects of the merits of the product but in emphasizing to them that he (the dealer) sells that product.



### ***Selling a nationally advertised product***

Look at this chart. How long would this mill supply house stand for a bearing like the Hyatt, if it wasn't a desirable account that helped to increase their sales.

The Hyatt Bearing is a power-saver—it does save oil—and it does stand up. That is why this agency is selling more and more each year.

The demand for Hyatt Bearings for all applications has now reached 50,000 a day.

An article of merit and real co-operation between dealer and manufacturers make the Hyatt Bearing a desirable account. The folder "Intensive Selling" is of interest to mill supply house executives. Would you like a copy?

**Line Shaft Bearings Division**

**Hyatt Roller Bearing Co., Newark, N. J.**

An advertisement to the dealer. Good material. Good arguments in the copy, but the expression lacks coherence.

The manufacturer who makes a variety of products but distributes only part of his line through dealers ought to have some individual in his advertising department specialize on co-operating with the dealer. This representative of the advertising department should report on results not only to the advertising manager but to the division sales manager in charge of the dealer distribution. The advertising man should make frequent swings around the circuit of dealers, so that he will be able actually to know how to fit in his work with the ideas of the dealers. He never will get very close to the solution of co-operating closely with the dealer by staying in the home office all the time, dreaming dreams of how he is going to reform the dealers.

#### GOLDEN RULE WORKS WELL IN MANUFACTURER AND DEALER RELATION

As a matter of fact, the dealers do not need as much reforming as the average manufacturer seems to think. It is true that the dealer smiles a hard, cynical smile when the manufacturer, sitting in the dealer's office, tells him what great plans he has up his sleeve for co-operating with his dealers. This is an old, old story to the dealer.

The average manufacturer shouts "co-operation". He spends a certain amount of good money for ink, color designs, schemes. He has on his staff a chap with a colorful personality and a pleasing voice who goes out among the dealers and stages get-together, pep-em-up meetings. Meantime, the manufacturer sits back and wonders why Mr. Dealer out in Kokomo doesn't abandon ninety-five per cent. of his other business and give all his time to the manufacturer's problems. He just naturally expects the dealer to *love* his line; never mind about the other ninety-nine things the dealer has to distribute. The same old routine is followed over and over again: Pep-em-up, no follow-up, dissatisfaction, low sales efficiency.

The golden rule works unusually well on the manufacturer-dealer relation. The manufacturer will get just as



## ROSE VALLEY SHOPS LEATHER BELTING

**R**OSE VALLEY LEATHER BELTING is sold exclusively through the dealer.

**T**HE dealer who handles Rose Valley center stock leather belting on our unusual exclusive agency plan is in position to build up a permanent and profitable business. He makes his full profit on every foot of belting sold in his territory.

**W**E give the dealer better protection, better service, better co-operation, because we do not solicit his consumer trade, but devote our entire attention to advancing his belting sales. And in addition to unusual service to the dealer, we actually furnish him a brand of belting that has no superior for quality and workmanship.

**F**OR details telegraph or write.

## ROSE VALLEY SHOPS

**Moylan-Rose Valley, Pennsylvania**

An advertisement to dealers. An advertisement like this, simple, dignified, attractive, stands out among the advertising pages like a gentleman among a group of loud talkers. Excellent copy.

much out of his dealers in the way of sales as he gives them in the way of earnest, sincere, co-operation. This co-operation must be in the form of hard work and service that is given constantly and unfailingly. The service given must grow out of a detailed study of the problem of each individual dealer, the problem of the dealer in promoting the sales of the particular manufacturer's product in the dealer's own territory. The only correct way to study the problem is with the dealer and in his territory.

The manufacturer might better not try to help the dealer until he has made a study of just how he can help him. He can lay out blanket plans for co-operating with the dealer, by means of advertising material that will cover his needs in general, but he probably will need to make an adaptation of the plan to suit the peculiar needs of each dealer.

In the case of a particular product the level to which the dealer rises as a sales building unit, and above the status of a mere distributor depends largely upon the amount of proper, effective co-operation given him by the manufacturer of the product.

This co-operation, of course, must be sold to the dealer. He must be so thoroughly sold on it that he will respond by using the service made available to him. Results that are sought because they promise to be mutually profitable, must be worked out in common. Good dealers respond to real, sincere co-operation. If a dealer in a particular territory proves to be absolutely unresponsive to repeated and continued efforts, he should be cut off the chain. *A live one in the same town will respond.*

## CHAPTER XXII

### CRITICISMS OF ADVERTISEMENTS

In considering the presentation for criticism of the advertisements on the following pages the authors had a choice between presenting a composite criticism, on the one hand, and, on the other, presenting several individual criticisms on each advertisement.

A composite criticism would have the virtue of consistency. An advertisement could be called good, or poor, or fair. The reasons why could be made consistent.

The method of presenting separate criticisms on each advertisement would be franker to the reader.

The latter was decided on as the better method.

The advertisements shown in the series were picked at random from the technical, trade, and popular magazines. No effort was made to pick examples of the best or of the poorest. Accordingly, they represent the average of magazine advertising.

Four practical men were asked to criticize the advertisements, a sales manager, an advertising manager, a sales engineer, and a purchasing engineer. The first three men have been engaged for several years in the advertising and selling of technical products. The purchasing engineer is a graduate engineer, was formerly a shop superintendent, and now buys great quantities of technical products for one of the largest manufacturers of technical products in the country.

None of these men had anything to do with building any one of the advertisements shown.

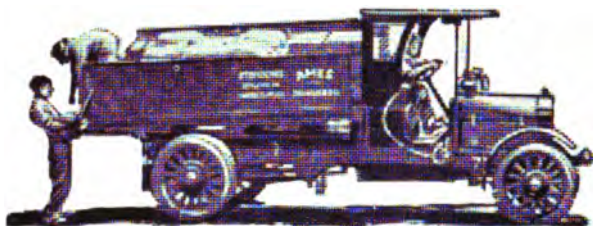
Each criticism was made absolutely independently of the others. There were no conferences, even to establish any unity in the point of view from which the advertisements should be criticized.

The inconsistencies of the criticisms on certain details are so great in the cases of some advertisements as to be almost ridiculous. These inconsistencies helped the authors to several good laughs—they may help the reader.

On the other hand, it is surprising how consistent the critics are in their judgements of the selling power of the advertisements. And, after all, our entire concern with an advertisement is based on its power to influence the prospective purchaser *to buy* the product advertised, either by its strength of argument or by its strength of suggestion.

(NOTE: The first six advertisements appeared in the popular magazines; the rest of the advertisements in the technical and trade magazines.)





## 48 of the First Fifty

Pierce-Arrow trucks are still running after 8 years. Many of these owners have standardized with Pierce-Arrows and will use no other truck.

We believe a truck must be inspected regularly. It keeps the truck running most of the time, reduces repair bills. Our inspectors save owners thousands of dollars by their suggestions.

No. 25 has served the Ames Transfer Co., New York, for 8 years. Tried out in competition with mule teams formerly used, its record was so good these teams were all displaced by Pierce-Arrows.

They standardize now with 36 Pierce-Arrows, each bought with profits earned by the trucks.

The actual mileage covered by No. 25 is in excess of 150,000 miles. The original worm still serves with no evident diminution of power.

# Pierce Arrow



**Delivers more work in a given time.**

**Loses less time on the job and off the job.**

**Costs less to operate and less to maintain.**

**Lasts longer, depreciates less and commands a higher resale price at all times.**

THE PIERCE-ARROW MOTOR CAR COMPANY, BUFFALO, N. Y.

**THE PURCHASING ENGINEER:**

A clear, concise advertisement bringing out one point in life and reliability. I think this is an excellent advertisement.

**THE SALES MANAGER:**

This advertisement appeals to me because it has sales ammunition well authenticated.

**THE ADVERTISING MANAGER:**

A regular he-man advertisement. Good in lay out, good in copy, in illustration, in selection of type, in everything. No one can eliminate a single word from the copy without losing part of the idea. The whole advertisement gives the idea of strength, of power. With this advertisement, no one need read the type to obtain the impression, clearly and boldly, that Pierce-Arrow trucks are big, heavy, massive, powerful things, built for endurance.

There is real art in the last line of copy, "The original worm still serves with no evident diminution of power." Eleven words and yet it tells a big story. Try to leave out one of those words. The writer of this advertisement was a real, honest-to-goodness writer. He took time for this piece of copy, he studied it, and re-wrote it many times. He cut out every unnecessary word. This copy has all the brevity of a cablegram and yet all the charm of good fiction.

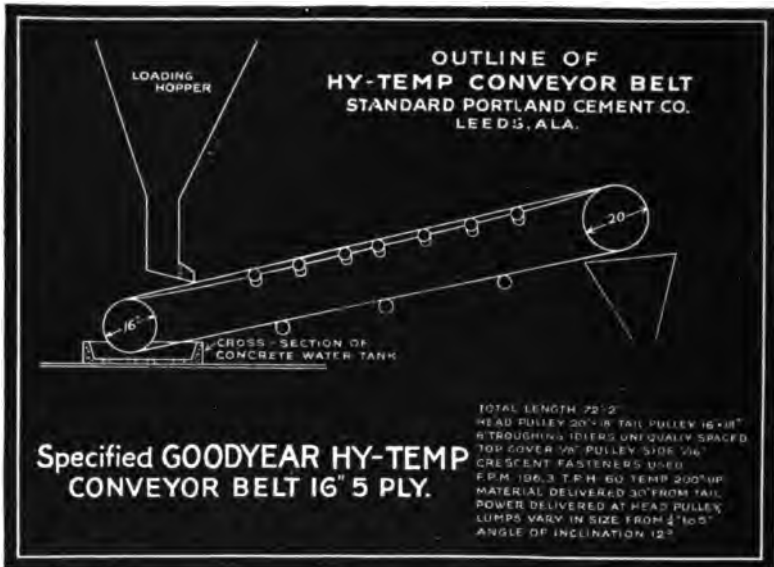
It is attractive. It is simple and dignified. It is a real work of advertising art.

**THE SALES ENGINEER:**

This is a very good advertisement from all standpoints. It has the right point of view. It plays up the service that the trucks are able to render. It also covers durability. These features are backed up by a report of the first fifty trucks sold. The advertiser instills confidence by speaking of but forty-eight of these fifty as still in good condition.

These points are further covered by referring to Truck No. 25, which is an open challenge to anyone who might care to seek an individual report from the Ames Transfer Company. In selling trucks, the manufacturer is selling a means of transportation. This being the case, one is interested in the cost of transportation. This advertisement is mindful of these features because it sticks entirely to the cost of operating a truck.

The copy is not involved and is very easy to read. Considerable attention is given to the words "Pierce-Arrow," which seems to balance up the advertisement. I think this is one of the best truck advertisements I have seen.



Copyright 1918 by The Goodyear Tire &amp; Rubber Co., Akron, O.

## Hot Clinker, a Conveyor—and the G. T. M.

*Hot cement clinkers, 200° and over, to be carried from open storage to the grinding mills, were the crux of the conveying problem put up by the plant superintendent to the G. T. M.*

*The G. T. M.—Goodyear Technical Men—gave that situation expert study embracing every process in cement manufacture at the plant of the Standard Portland Cement Co., Leeds, Ala. He realized that here was an unusual problem. The clinker could not be cooled sufficiently in the processes previous to conveying. The best thing to do would be to provide some means of cooling it as it came onto the belt.*

*So he made two recommendations: a heat-resistant Goodyear Hy-Temp Conveyor Belt, known to be capable of withstanding as much as 200°; and a cooling vat through which the belt might run as it struck the tail pulley and come up dripping with a film of cold water that would cool the clinker dropping from the hopper. Both recommendations were approved.*

*Up to September 1, 1918—after six months of operation—this Goodyear Hy-Temp Conveyor had carried 61,000 tons of clinker.*

The Standard Portland Cement Co. credits a saving of \$300 in belt cost alone to this Goodyear Conveyor. Besides, it has effected a high operating economy. A letter from them states that the Company is "so pleased with its performance that we have ordered a duplicate for replacement, although from present appearances this belt will continue to give good service for some time."

*Wherever heats up to 200° are registered on conveying jobs, in mines, in cobling plants, in cement factories, Goodyear Hy-Temp Conveyor's special construction sets up new records in heat-resistance, ability to withstand abrasion, and quantity of tonnage delivered.*

*Working with your own plant superintendent, the G. T. M. can make an analysis that assures intelligent specification of the belt to the duty required. The G. T. M. a service is yours without charge or obligation. If his suggestions and the Goodyear Belt he recommends prove as valuable in your service as in the instance cited here, and in hundreds of similar cases the country over, our return will be amply guaranteed by your satisfaction.*

THE GOODYEAR TIRE & RUBBER COMPANY  
Offices Throughout the World

BELTING · PACKING HOSE · VALVES  
**GOOD YEAR**

**THE PURCHASING ENGINEER:**

Another blue-print advertisement. (AUTHORS' NOTE: The drawing was printed in blue, to imitate a blue-print). This one is simple enough to be comprehended at a glance. The reading matter would probably be looked through by any one interested in the particular type of apparatus shown. I can see little to be gained, however, by the cryptic "G.T.M."

**THE SALES MANAGER:**

An excellent advertisement. The illustration is made in blue, in imitation of a blue-print. It would be mighty hard for a man at all interested in things mechanical, or in belting in particular, to pass this advertisement by without giving it at least a few minutes' attention. The man who actually is interested in belting is bound to spend considerable time on it.

The man who buys belting is interested in belting, and, after all, isn't he just the man they want to read the advertisement? The advertisement that is selling belting should sell the man who buys belting—the others do not count.

The suggestion made in the advertisement is good from an engineering standpoint; that is, the Goodyear Company has actually given a constructive suggestion for cutting down the operation costs on a particular belt. This appeals to the man using belting.

There is a definiteness about the whole advertisement that appeals. There are plenty of copy and plenty of details for the man who really is interested in this class of belting. And, of course, when you get right down to it, he is the man they want to sell.

The publicity value of the advertisement is unimpeached by giving plenty of detail, because the name Goodyear is put where nobody can miss it.

To the student of advertising, I should recommend this as being pretty close to the ideal and very worthy of plenty of study. The sales ammunition in the advertisement is absolutely definite and has plenty of authentication because the problem being considered is tied up definitely with a company actually operating the particular belt. I have tried to find some weakness or fault with this particular advertisement but I must confess that I give up. The advertisement is as nearly perfect as could be made. It certainly satisfies me.

**THE ADVERTISING MANAGER:**

A good advertisement in every way, from the view-point of copy, layout, and illustration. An appeal to the technical and semi-technical man.

**THE SALES ENGINEER:**

There's no sport criticising an advertisement like this. I can't find *anything* wrong with it. The man who wrote this advertisement certainly deserves a lot of credit for livening up a dull and hacknied subject like belting.



The man in the engine room who daily sees and uses valves and knows valve requirements, realizes the significance of the Jenkins Diamond Mark.

He knows that Jenkins Valves are designed and made for the maximum service, not for the average. Every valve of each type is more than sufficiently strong and heavy to meet the severest service possible in the use for which it is recommended.

Jenkins Valves of brass, iron and steel in types and sizes to meet all requirements of power plant, plumbing and heating service, are obtainable through supply houses everywhere.

Only valves having the Jenkins Diamond Mark cast in the body may be truthfully called and lawfully sold as Jenkins Valves.

Since 1865 experience has taught the man from the engine room to look for valves with the Jenkins Diamond Mark, and to insist upon having them.

*Engineers, Architects, Home Owners  
are invited to write for informative  
booklets.*

## JENKINS BROS.

80 White Street

New York

Chicago  
Pittsburg  
Washington

Boston  
San Francisco  
Montreal

Philadelphia  
St. Louis  
London



# Jenkins Valves

**THE PURCHASING ENGINEER:**

This is very attractive for a general advertisement. No particular sales points are brought out, but if one were contemplating the purchase of valves, the prominence of the firm name would impress the name on one's mind.

**THE SALES MANAGER:**

This advertisement of a technical product in a popular magazine is justifiable because of the broadness of the distribution of the product advertised. Although the appeal in the copy is made to the man in the engine room, valves are subject to the buying influence of engineers, architects, and home owners.

The copy strikes me as being rather weak. The illustration of the man holding the valve is good; attention is concentrated at the right spot in the advertisement.

I am a novice at laying out advertisements and really know little about the subject but this advertisement strikes me as being "over laid out," so to speak. There is a consciousness of too much arrangement through the thing. The advertisement lacks simplicity.

**THE ADVERTISING MANAGER:**

As a unit this advertisement is good. The illustration is pleasing to the eye, it truly illustrates the advertisement and the copy (a thing that many illustrations do not do). It shows in one glance the wide range of valves made by this company. Using the great power valve as a background for the engineer who holds a small valve in his hand is ingenious. The copy is good; it is not too long.

**THE SALES ENGINEER:**

The general impression of this advertisement is good. The strongest feature of the advertisement is the photograph of the man holding the valve in his hand, as well as the illustration showing the small valves at the top of the page. In the background is a very large valve showing the Jenkins valve for all classes of service.

The use of color is very good. The color scheme is possibly worked in to illustrate brass valves, as well as the steel valves not shown in color. This color then works right into the product, and at the same time gives a certain amount of attraction to this particular page. I was not very much impressed with the copy used in this advertisement.

(AUTHORS' NOTE: In the original advertisement, color, yellow, was used in the ruled lines at the top, three of the valves at the top, the valve in the man's hands, and the large words at the bottom, "Jenkins Valves").

## Judge A Tractor By Its Bearings



You feel a horse's joints before you buy him. If he is spavined or stiff-jointed you wouldn't take him even at a bargain.

Be just as cautious in the purchase of a tractor—judge it as you would a horse—look at its bearings—the joints of the machine.

The tractor with plain or other unsuitable bearings is subject to stiff-joints—stiffness caused by lack of lubrication or poor adjustment.

Hyatt Roller Bearings make sound joints. They reduce friction—overcome lost motion—eliminate wear and the necessity for frequent oiling or adjustment.

Tractor makers know the value of uninterrupted, long lasting service—that's why more than fifty concerns now build Hyatt Roller Bearings into their machines.

Your permanent satisfaction is their aim and Hyatt Roller Bearings give it to you. *Be sure the tractor you buy is Hyatt-Equipped.*

**HYATT ROLLER BEARING CO.**

CHICAGO, - ILLINOIS

**THE PURCHASING ENGINEER:**

This is a very good advertisement. The relationship between the bearings of the tractor and the joints of the horse is quickly presented to the eye. This brings out a definite point in a definite way and suggests not only to the tractor buyer but to the general public that this relationship actually does exist. Connective advertising of this type I believe has a strong appeal.

**THE SALES MANAGER:**

This is an excellent advertisement because it speaks in terms with which the farmer is familiar. It draws a comparison between the joints of a tractor and the joints of a horse. When a farmer buys a horse, one of the first things he looks at is the horse's knees to see if the horse is spavined or stiff-jointed. This advertisement is intensely human.

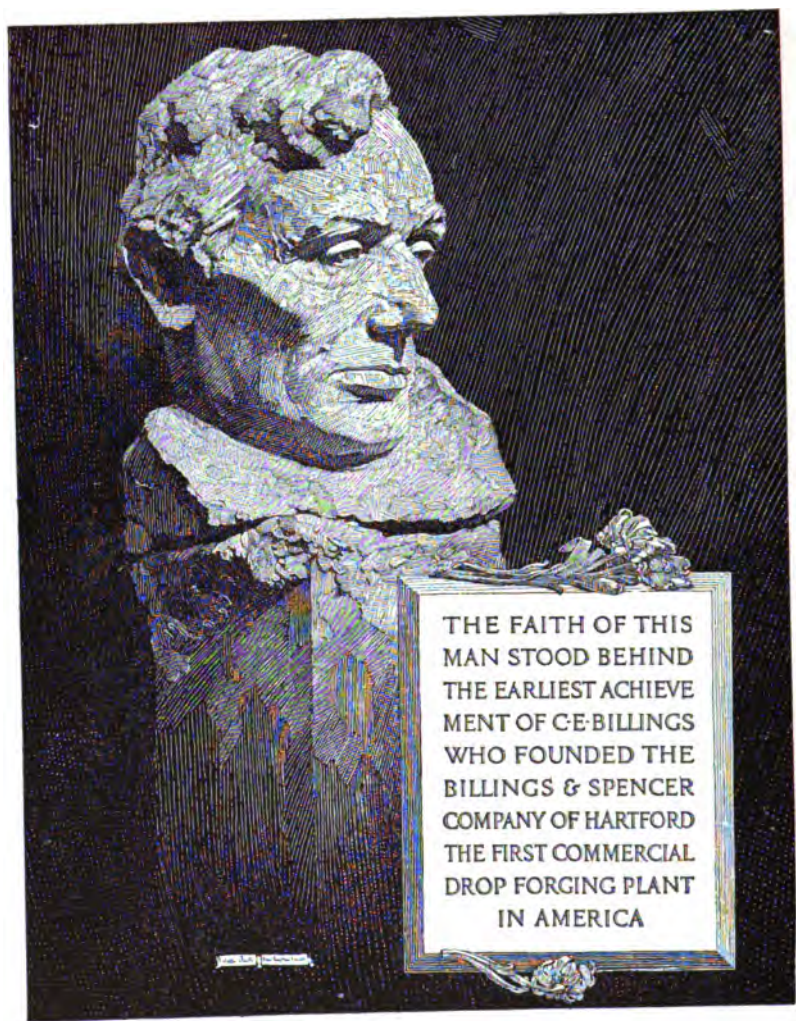
**THE ADVERTISING MANAGER:**

A splendid advertisement in every way. The illustration ties right up to the copy. The pictures in themselves tell a story. The copy is good. It is direct. It is forcible. There is not a word that can be left out. There is no repetition. It is a good advertisement.

**THE SALES ENGINEER:**

An excellent advertisement because it has plenty of life and interest. The copy is well written. The advertisement connects up very effectively the details of the tractor with other details that the prospect has always been interested in whenever he bought a horse.





**THE PURCHASING ENGINEER:**

A supremacy advertisement of the strong type. Strength in the picture and strength in the concise reading matter.

**THE SALES MANAGER:**

This is an excellent institutional advertisement. The illustration and the entire carrying out of the advertisement are artistic. The advertisement also had news value, due to the fact that it was run in the February 7th issue, a few days before Lincoln's birthday.

**THE ADVERTISING MANAGER:**

Art in advertising, no doubt about it. It would be useless to discuss the illustration for nothing could be said about it. I am for this kind of advertising. One looking over this copy of his magazine is going to stop at this advertisement. One is going to look at it, and carefully too.

But why couldn't the copy have been a bit more lucid?

With all the advertising that is being carried nowadays I think that this is the kind of stuff, generally, that is getting over.

**THE SALES ENGINEER:**

Very few people will connect this advertisement with drop forgings. There should be some connection between drop forgings as made by the Billings & Spencer Company and the customer's interest. This could have been accomplished very easily by an insert.



## FIRST *in* Retail Delivery

**D**EPARTMENT store service is the laboratory of retail delivery. Not only is it the most searching test to which a delivery truck can be put, it is also the most sensitive recorder of results.

The operations are constant and exacting. To keep a stream of merchandise flowing from railway terminal to warehouse, from warehouse to delivery depot, from depot to the customer's doorstep, requires unfailing performance daily, hourly, in all kinds of weather.

A slight interruption might throw the whole system out of gear. A small saving in cost or time of delivery is a big item, when applied to millions of packages.

Department stores *must* have the best delivery equipment. Competition compels it. For years they have been testing out all grades and makes in search of the most efficient truck. The weeding-out process is still on. But steadily and surely White Trucks are being standardized in the largest and most important retail fleets. In metropolitan centres they are the very backbone of department store service.

In New York, eighteen Department Stores operate 431 White Trucks; in Pittsburgh, ten stores operate 291; in Cleveland, eight stores operate 120. In all, 224 Dry Goods and Department Stores operate 1639 White Trucks.

Many stores report mileage records for their White Trucks of 100,000, 200,000 and 300,000 miles. Gimbel Brothers say: "Our White Trucks (25) purchased in 1911 and 1912 have run over 100,000 miles each and are still in service. We have compared them with three other standard trucks and have decided they are best suited to our use." Gimbel Brothers now own 78 Whites.

In the White fleet owned by The Higbee Company, Cleveland, one truck has covered 265,000 miles, another 225,000 and another 100,000 miles.

White Truck performance in department store service is so widely and favorably known that it has become the standard for the whole retail delivery field. Comparative records everywhere show that White Trucks *do the most work for the least money.*

THE WHITE COMPANY, *Cleveland*

# WHITE TRUCKS

**THE PURCHASING ENGINEER:**

This advertisement has the advantage of offering definite sales argument applying to a definite use for the product shown. The short testimonial shown here is very attractive.

**THE SALES MANAGER:**

This advertisement is very well gotten up. Well balanced, and attractive. Good use of white space. Excellent sales ammunition and good copy.

**THE ADVERTISING MANAGER:**

An attractive advertisement. Good illustration, good copy. There has been thought put in on both the illustration and the copy. Good typography. Plenty of white space. An attractive advertisement in every way.

**THE SALES ENGINEER:**

The copy used in this advertisement is good. They have backed up this copy by giving actual data of trucks used by the large companies. The statement made by Gimbel Brothers is good and backs up the rest of the advertisement.



***The Mark on the Bearing***

THE mark on the bearing tells its history—the history of its making and past record and thereby in advance the history of its future performance. When that mark is the S. R. B. Diamond, it means the finality of bearing quality, frictionless operation, dependability, demonstrated in service from the beginning of the automotive industry.

  
 Single Row      Double Row  
**ANNULAR BALL BEARINGS**

Bearings do their work—in the automobile, truck, tractor or other mechanism—hidden away from sight. All the more credit to the manufacturer who installs bearings of S. R. B. quality—all the more reason why you should know the make of bearings in the vehicle or machinery you buy.

From the melting, rolling and annealing in our own steel plant of the High Chrome High Carbon Electric Furnace Steel that is

the foundation of S. R. B. strength to the last ten-thousandth inch of accuracy of finish, S. R. B. Bearings are the product of the same organization working to one ideal.

You will find S. R. B. Ball Bearings and S. R. B. Taper Roller Bearings in those motor cars, trucks and tractors whose names are instantly thought of as leaders in their respective fields.

**STANDARD STEEL AND BEARINGS INCORPORATED**  
Philadelphia      Plainville, Conn.      Norwich, Conn.      New Haven, Conn.      Pittsburgh  
Standard Roller Bearing Co.      Braeburn Steel Co.

Executive Offices: 347 MADISON AVENUE, NEW YORK CITY  
 Controlled and Operated by

**MARLIN-ROCKWELL**  
 CORPORATION

**THE PURCHASING ENGINEER:**

This is a supremacy type advertisement that falls far short of the mark. I get almost no reaction from this advertisement.

**THE SALES MANAGER:**

This is the inspirational type of advertisement again, evidently written by some advertising man without a bit of sales ammunition at hand. You can substitute any other company's name for the name shown in the advertisement and the new name would fit in about as well as the one there now.

**THE ADVERTISING MANAGER:**

A good idea for an advertisement but ruined by lay-out and illustration. Three quarters of the space of the advertisement is given up to something that means nothing to the average man, whether he be a layman or engineer. One has to look twice at this advertisement to see just what it is.

The lack of white space gives the whole advertisement a crowded appearance. "The Mark on the Bearing," could have been brought out so that it would have conveyed the same idea only with less confusion to the eye.

The copy is fair. It is regular copy. Remove the word "Standard" from the copy and it can be made to apply to any ball bearings. This is a good piece of labor-saving copy.

**THE SALES ENGINEER:**

The illustration used in this advertisement is fair. The advertisement has not an ounce of detail to create interest. The copy is only fair. I should guess that the copy was written by a copywriter who never had sold ball bearings to machinery users. Neither had he sold ball bearings to designers of machinery.

# LANCASTER STEEL

WHEN you buy steel from the Lancaster Steel Products Corporation, you are purchasing more than so many tons of steel—you are buying a product backed by twelve years' scientific knowledge of specialized steel making.

For whatever purpose specified Lancaster Steel is correct. Our special cold-drawing and cold-rolling process plus our scientific laboratory tests make this assurance possible.

Cold Drawn 3½% Nickel Steel  
Cold Drawn Chrome Nickel Steel  
Cold Drawn Chrome Vanadium Steel  
Cold Drawn Carbon Steel  
Cold Drawn Steel (Special Analysis)

Cold Rolled High Carbon Strip Steel	
Brake Band Steel	Cold Drawn Special Shapes
Diaphragm Steel	Electric Tool Steel
Red Label Drill Rods	Screw Stock

Representatives at convenient locations are ready to serve you upon request. Send for our S. A. E. specification chart, which will be mailed free from any of our offices.

**LANCASTER STEEL PRODUCTS CORP.**  
**MILLS: LANCASTER, PA.**

WESTERN SALES OFFICES, CHICAGO and DETROIT    EASTERN SALES OFFICES, HARTFORD, CONN.

**THE PURCHASING ENGINEER:**

A very good advertisement. The name is given sufficient prominence and the products for sale are listed concisely and clearly. The advertisement has dignity and while no direct appeal is made to buy, the reaction to the advertisement in the mind of the reader is strongly in favor of the product.

**THE SALES MANAGER:**

This advertisement contains sales information but lacks attractive qualities, so far as the physical features are concerned.

**THE ADVERTISING MANAGER:**

This advertisement has the appearance of being spotty, which effect is caused by the different sizes of type. The copy amounts to but little; what is said can be said of any other steel company. The whole advertisement is nothing more than a poorly designed business card, carrying no particular sales message. I wonder if a Lancaster salesman, calling upon a prospect, does not have any more convincing argument to offer than is contained in this particular advertisement. If this is all that can be said, if a business card is all that is desirable, then let it be sent to some typographical expert who can set it in such a manner as to give it individuality and personality.

**THE SALES ENGINEER:**

A very good advertisement, considering the product to be advertised. Lancaster Steel are the words that should be gotten across. It is very hard to use illustrations for products of this type, but I think they have gotten around this very nicely by using the words Lancaster Steel in the type as shown. It is very hard to write copy about steel and I regard the copy here as very good. There is nothing pretentious about the statements made. The listing of the particular products made is also very good.

Sometimes it is very hard to find a company that is able to draw the various alloy steels. The fact that the steels are listed here should go a long ways in bringing in some real inquiries. I should say that this advertisement has the necessary attractive features due to the words Lancaster Steel and the way in which they have featured the products they are able to furnish. It also has selling ability because of the listing of these products.





## Williams' Superior Drop-Forgings

**T**HE massive, powerful Handley-Page airplanes didn't just happen. Their amazing capabilities are due to the infinite care and attention devoted to their every part; but, possibly, the celebrated Rolls-Royce engines, with which they are powered, were the greatest factor in their success as a bombing—weight-carrying—plane.

And, on coming to America, these British motor manufacturers chose us to make their forgings for they realized that our equipment, experience and reputation guaranteed the superior character of our product.

Forgings qualified to help break the Hindenburg Line are of a quality to resist breakage in commercial use. Inquiries for dependable drop-forgings solicited.

**J. H. WILLIAMS & CO.**

*"The Drop-Forging People"*

Plants:  
Brooklyn and  
Buffalo, N. Y.

General Offices:  
11 Richards St.,  
Brooklyn, N. Y.

**THE PURCHASING ENGINEER:**

A good, strong, clean-cut advertisement. The picture is attractive and the argument to the point. Of course it is in the form of a testimonial, but under the circumstances I believe that the testimonial is to the point and carries a very definite sales argument.

**THE SALES MANAGER:**

An excellent example of a good technical advertisement. The advertisement is well laid out; it is well balanced; the illustration is good, particularly in its attention attracting qualities; the copy is well written. And on top of our list, it has the right kind of a sales message. The message contained in this advertisement is the sort of thing that a good salesman would tell his prospect for drop forgings. A very common form of effective sales argument is to prove that your product is good by showing that good people, who have a reputation for exercising discrimination, use your product. This sales point is taken excellent advantage of in this particular advertisement.

**THE ADVERTISING MANAGER:**

An attractive lay-out ruined by awkward copy. The idea of the advertisement is, as I understand it, that the manufacturers of Rolls-Royce motors have selected the J. H. Williams Company's forgings. If this is correct, if this is the idea of the advertisement, then why not say so in plain, simple English?

If an advertising man has an idea for his copy and he understands this idea thoroughly, if it is clear to him just what he wants to say, then let him say it in plain, every-day, matter-of-fact English. His message will be understood by more readers. The big trouble is that many a copy-writer when he sits down to write hasn't the slightest idea what he is going to say. The natural result is that he says nothing in his copy.

**THE SALES ENGINEER:**

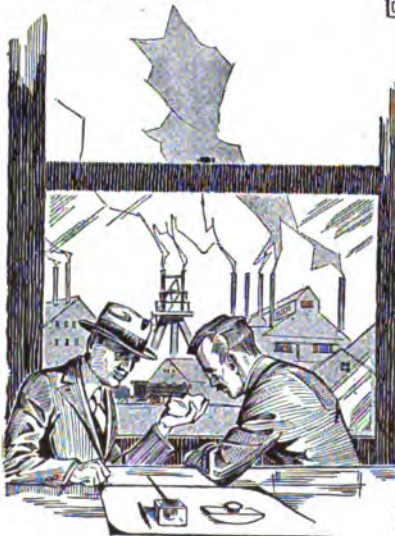
I should not give this advertisement very much credit because the illustration is entirely foreign to the subject under consideration. I should not imagine that a photograph of an aeroplane would have much attraction in the Iron Age for drop forging prospects. The copy does not have any selling; neither does it have any information in it that would sell the J. H. Williams Company as being a good concern to buy drop forgings from. About all that this advertisement does is to tell the fact that the Williams Company can furnish drop forgings. The copy is rather boastful and is of a type that would not instill confidence.

  
**THE NATIONAL  
TRADING CO.,**  
 SWETLAND BLDG.  
**CLEVELAND, OHIO.**  
 Pittsburgh Office—616 Oliver Building  
 Philadelphia Office—418 Crozier Building  
 St. Louis Office—702 Federal Reserve Bank Building  
 Chicago Office—108 So. La Salle Street, Temple  
 Building

# TRADING *then,*



*and now*



**We Offer  
For Prompt Shipment  
Subject to Prior Sale**

**Pig Iron**

Foundry  
Basic  
Bessemer  
Malleable

**Steel**

Finished and Semi-Finished  
Ferro Manganese  
Spiegeleisen  
Ferro Silicon  
Magnesite  
Chrome Ore  
Fire Brick  
Silica Brick  
Magnesite Brick  
Fluor Spar  
Burned and Raw Dolomite  
Limestone, Etc.

**THE PURCHASING ENGINEER:**

The picture and art work on this advertisement are indeed very far fetched. The sales argument, however, is concise and gives a clear idea of what is offered. However, I do not think this advertisement has much strength.

**THE SALES MANAGER:**

This advertisement strikes me as being sloppy in every respect.

**THE ADVERTISING MANAGER:**

I wonder when the advertisers in technical papers will realize that good art work is a paying investment. In this advertisement there is evident painful effort to devise an illustration to live up to what otherwise would be a very uninteresting announcement.

If the National Trading Company dates back a hundred years or so, if the forbears of this organization traded with the Indians, buttons and licorice drops for precious skins, then there is reason for this illustration. If this is so and it was the inspiration for the illustration then why not give some sort of inkling of it? And if this is not so, then there is no more excuse for this illustration than there would be, if the picture were to show Jack and Jill tumbling down the hill. Just what Daniel Boone in the upper picture, carefully examining a skin, has to do with the near-sighted buyer in the lower corner, who presumably is going to have a piece of pig iron thrown at him, is something that I cannot understand.

Rather than all this futile struggle after something that shall appear as highly original and clever, why wouldn't it be far better to run a simple announcement of what is offered for sale?

**THE SALES ENGINEER:**

The general impression of this advertisement is not good. The illustrations have no relation to the selling problem at hand. The selling copy "Trading Then and Now" has no force. This company could have accomplished its object by taking a quarter-page for this story. The full page gives them some attention not accomplished in smaller space, but, so far as selling is concerned, the space is not justified.

# **VANADIUM**

## **THE MASTER ALLOY**



### **VANADIUM CORPORATION OF AMERICA**

**GENERAL OFFICES -- Equitable Building, New York City**  
**LONDON OFFICE -- 64 Victoria Street, Westminster, S. W.**

**THE PURCHASING ENGINEER:**

Considering the product being advertised I do not know of any better way of advertising it than this advertisement shown here. The prominence of the name of course strikes the eye of the reader and the whole sales argument is confined in three words. It would be hard to figure out a better way than is shown here.

**THE SALES MANAGER:**

This is a good example of an advertisement that is concentrated entirely on obtaining publicity for the product. The advertisement is artistic, but I believe that more economical use could be made of the space by incorporating a certain amount of sales message, which could be done without discounting the attractiveness or the publicity value of the advertisement.

**THE ADVERTISING MANAGER:**

A dignified, quiet announcement, carefully designed and well displayed. "Vanadium, The Master Alloy." What more can be said? What more is there to say?

Such an advertisement reflects a company of dignity and strength. I do not approve usually of the business-card type of advertisement, where there is any sales argument that can be advanced, but this is excellent.

**THE SALES ENGINEER:**

This advertisement is good from a publicity standpoint. However, I regard it as very poor from a selling standpoint. Even from the standpoint of publicity, this feature could be strengthened by the use of selling copy. By "selling copy," I mean some actual results accomplished through the use of vanadium. There is no connection between the word "vanadium" and the reader's experience. In this respect, the advertisement fails to have the proper force and convincing features that should be incorporated in every advertisement.

# ECONOMY

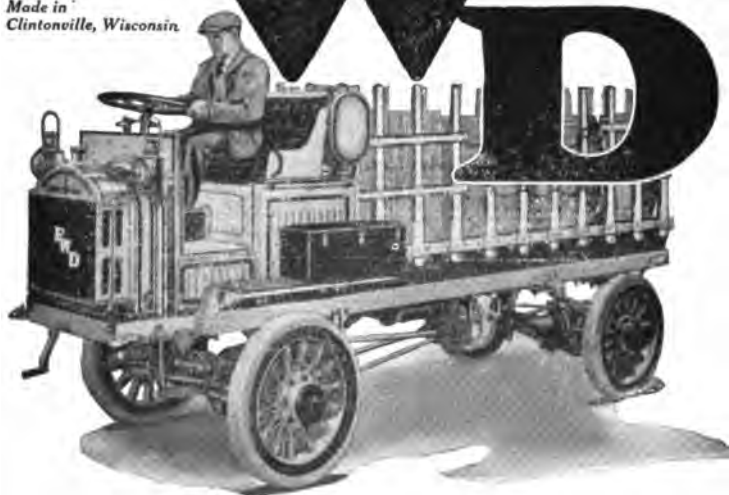
**Dominates All Other FWD Features**

**N**OTWITHSTANDING the wonderful performance record made by FWD Trucks in the war, even conceding the popular opinion of greater power and a wider range of operation, due to its ability to negotiate good or bad roads—*still*, the outstanding feature of the FWD is economy. Let us give you all the facts. Write for literature.

# FWD

The Four Wheel  
Drive Auto Co.  
Dept. 000  
Clintonville, Wisconsin  
*Canadian Factory: Kitchener, Ontario*

*Made in  
Clintonville, Wisconsin*



**THE PURCHASING ENGINEER:**

A good advertisement. The name is given strong prominence and the thing which every buyer is looking toward, namely, *economy*, is brought out strongly.

**THE SALES MANAGER:**

This advertisement illustrates a common error that is made in advertising. *Automobile Topics* is really a trade magazine. It is not a consumer magazine. The advertisement of the F. W. D. Company shown is written with a message that would appeal to consumers. The sales message of the advertisement used in this publication should be directed to the dealer. The dealer is not particularly interested in the economy of a piece of apparatus that he is selling, except as this economy might affect his building sales for the articles. The dealer is more interested in the motor truck as a means of making money. The motor truck is simply a business proposition to him, and in the trade magazines, the business features should be developed.

**THE ADVERTISING MANAGER:**

Art work, very poor. The driver looks as if he were afraid of the truck. The big letters F. W. D., while attracting the readers attention detract from the illustration of the truck. One good point of the advertisement is this: Only about one percent of these trade paper advertisements is more than just glanced at. A reader turning the pages of this magazine sees the big letters F. W. D. and the word Economy. If these two stick in his mind then the advertisement has paid for itself.

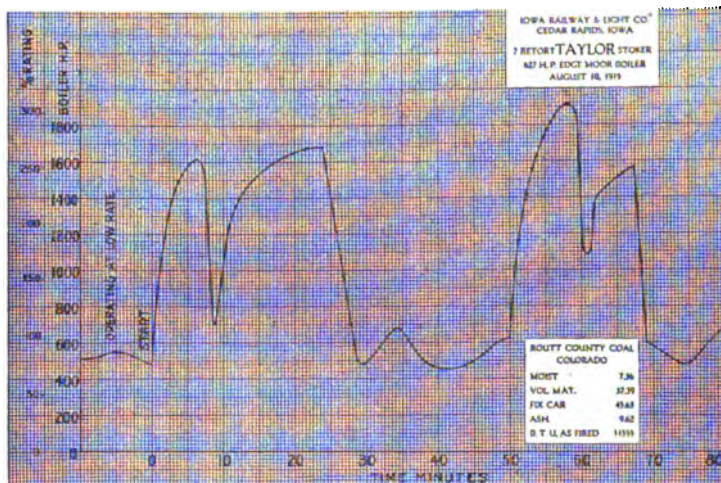
Copy, awkward. The first sentence says too much; it is not a good sentence. The man who wrote this advertisement does not know what a sentence is. Too, there is redundancy in his last two lines, "Let us give you all the facts" and "Write for literature."

**THE SALES ENGINEER:**

This advertisement commands attention because of the letters F. W. D. in the center of the page. I don't like the caption "Economy" because this particular word is run to death in most advertisements. I believe that they have certain data that will bear out these economy features and I believe that the advertisement would be much better if some of these features had been shown. This advertisement has not much selling ability because no performance records are given.



# The Taylor Stoker



## Is this your plant ?

Here is a Taylor FLEXIBILITY curve, showing what this stoker will do where there are sudden and abrupt demands for steam, without warning and at varying intervals. Such conditions frequently obtain in chemical and dye plants, and in the manufacture of steel, rubber and paper. If you are confronted by demands similar to this—or, on the other hand, if you require uniform temperature and constant steam pressure—you can meet all demands with the TAYLOR STOKER. And it makes no difference *what grade of coal* you are using. No system of combustion has ever demonstrated such flexibility as the Taylor. Send for the Taylor "Fuel Burning Reports" and the new Catalog.



**American Engineering Company**  
Philadelphia



Foreign Licensees: Babcock & Wilcox, Ltd., Ortel House, Farringdon Street, London, England

**The Taylor Stoker**

**THE PURCHASING ENGINEER:**

This advertisement is a little complicated, even for the average reader of technical magazines. Too much study is necessary to find out what it is all about.

**THE SALES MANAGER:**

This is a good advertisement. It is a good point to attract the attention of engineers by means of curves and other graphical illustrations. These naturally appeal to engineers, and, if properly presented, are always good attention attractors. The advertisement has good publicity value for the Taylor Stoker. The sales message and method of presenting it are good. The advertisement could have been improved by providing a little more space for the copy, perhaps by cutting down a bit the size of the type used at the top of the page. More room for the copy would have permitted displaying or spacing the copy out in such a way as to make it more easily readable. The copy itself is good.

**THE ADVERTISING MANAGER:**

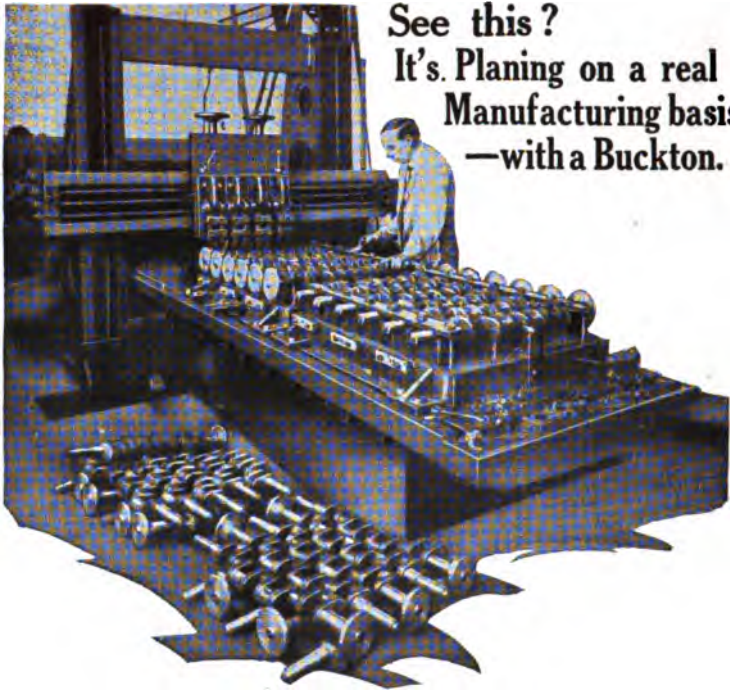
A good idea, but spoiled by the solid lettering, "Is This Your Plant?" The lettering at the top of the advertisement, the solid lettering mentioned above, in the middle of the advertisement, and the heavy words "Taylor Stoker" at the bottom of the advertisement spoil the unit effect of the whole advertisement.

That heavy lettering in the middle of the advertisement does not add any extra attention value to the advertisement. And if it were left out, or reduced in size there would be more room for the copy, which is a bit crowded.

The copy is good but the set-up of it is poor. When it is necessary to run so much copy and to set it in such a small point it is better to run it in two columns. Breathing space is as necessary around type and illustrations as around men. This advertisement is crowded.

**THE SALES ENGINEER:**

To a real prospect for stokers this is an interesting advertisement. It gives the reader something to fasten his mind on. The man who is contemplating a change in his boiler-room practice will wade through this advertisement. And after all, every advertisement should be written to sell the prospective buyer. The others don't count.



**See this?  
It's Planing on a real  
Manufacturing basis  
—with a Buckton.**

**T**HESE alloy-steel crankshafts are for the Austin Car. They have to be planed  $\frac{1}{4}$ " deep on each side of the eight webs, and to keep this operation in time with the rest of the plant, they use the "Buckton."

Note the fixture on the table. 12 crankshafts are planed at a time. This is a factor in output-getting, but its effective use is rendered possible by the rigidity of the machine and the smooth and powerful drive secured by the "Buckton" spiral motion, enabling eight tools to be working simultaneously—and taking good cuts too. That explains why the production works out at only 10 minutes per crankshaft, floor to floor.

*When sending your enquiry, please specify the work you wish to do.*

**JOSHUA BUCKTON & Co., LTD.,**  
**LEEDS.**

**THE PURCHASING ENGINEER:**

This is a fairly good advertisement. It shows a machine used for multiple production work, which would have a strong suggestive effect in the mind of the average shop man or buyer.

**THE SALES MANAGER:**

This is a good example of a real, selling advertisement. The illustration is very good; the copy is good; the choice of type is good; and the balance of the advertisement and use of white space is good. The headline is good. The best part of the advertisement is the sales ammunition given in the advertisement. The illustration, the head line, and the copy have real sales force. There is a definiteness about the sales message that gives it effectiveness.

**THE ADVERTISING MANAGER:**

This proves that the English manufacturer does not always use cards. I think that the head lines could be improved upon. The illustration is good. The copy is good. It is plain and direct. There is a story to tell and the copy tells it. There is no effort at "fine writing." It is a good advertisement.

**THE SALES ENGINEER:**

This is a very good advertisement. The illustration is good. Besides, it takes the reader directly to his own production problems. It is an actual photograph, which cancels out all element of doubt in the reader's mind. The copy fits in with the photograph. The copy is very well written. There is nothing boastful about it.

## ***There is no reason why the belt user should pay the cost of stretch***

---

Beginning January 1, 1919 every Leviathan and Anaconda belt will be sold under a guarantee definitely protecting the buyer against stretch.

For every 1% the belt stretches after the first cut, the Main Belting Company will refund 3% of the purchase price. The first cut is excepted merely because it is generally recognized that it is more a matter of taking up slack than taking out stretch.

In the case of endless belts, the total take-up is to be charged against the belt as stretch.

This guarantee will apply on every belt we recommend—and we do not recommend Leviathan or Anaconda for positions where they do not belong.

There is no reason why belt users should pay the cost of taking out stretch in any belt.

The Main Belting Company is the only company definitely assuming this obligation.




---

### **MAIN BELTING COMPANY, PHILADELPHIA**

**NEW YORK BOSTON CHICAGO PITTSBURGH ATLANTA SAN FRANCISCO**

**Birmingham, England Paris, France Baku, Switzerland Kristians, Norway  
Johannesburg, South Africa Petrograd, Russia Havana, Cuba**

**MAIN BELTING CO. OF CANADA, LTD., Montreal, Toronto**



**THE PURCHASING ENGINEER:**

This advertisement has a very strong appeal to the frugal buyer. I believe that this is a good, strong advertisement. It certainly has a very definite sales point. A definite guarantee always has a strong reaction on the mind of the buyer.

**THE SALES MANAGER:**

This is interesting because of the application of the guarantee principle in selling a technical product. From an economics point of view there is a great question about the advisability of guaranteeing things but there is no getting away from the fact that a guarantee makes a certain appeal to purchasers. A guarantee by a responsible company has force with a prospective buyer.

This particular advertisement expresses the guarantee well, and I should judge this as a good advertisement. The advertisement has a definite something to say. Of course, writing such an advertisement is comparatively simple, because the guarantee provides such excellent ammunition.

**THE ADVERTISING MANAGER:**

An interesting announcement, worded in a plain, direct way.

**THE SALES ENGINEER:**

The caption used in this advertisement is good. The copy is well written. The advertisement secures attention and I believe that every man who sees it will read the entire advertisement. If we assume that the policy of refunding for stretch is correct, I should say that this is an excellent advertisement and should produce results.



### Heavy Loads with Poor Coal

The Walnut plant of the Columbus Railway Power and Light Company is of especial interest from the fact that it carries heavy loads with poor coal.

Recent 24 hour tests on eight-retort stokers operating above 300% with 10,775 B. T. U. coal gave an efficiency with economizer of 76.4%. In the above plant are installed fourteen eight-retort stokers under 440 H. P. E. & W. boilers.

The problem of burning low grade fuel—of such vital interest at this time to all power plant managers—has been successfully met by Riley Underfeed Stokers. We can refer you to many other plants where the installation of Riley Stokers has made possible—

*burning poorer coal*

*meeting heavy load demands*

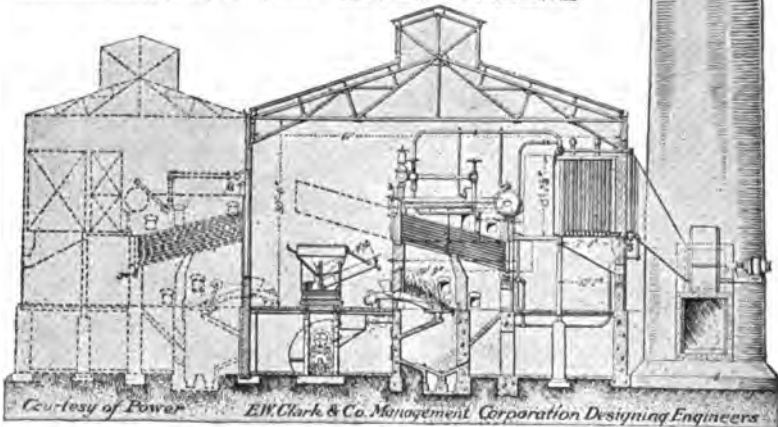
*saving of fuel and labor.*

Ask for our Catalog F-2.

**Sanford Riley Stoker Co.**  
Worcester, Mass.

British Licensees: Erith's Engineering Co., Ltd., London

French Licensees: Erith Leroy & Cie., Paris



**THE PURCHASING ENGINEER:**

A good advertisement of the testimonial type. Very definite statistics are given, which suggest to the mind of the reader that he could corroborate them if he desired. The advertisement is very attractive.

**THE SALES MANAGER:**

An excellent advertisement from several standpoints. The photograph of the stokers in operation and the line drawing of the installation are fine. The advertisement has excellent sales ammunition. It is well laid out and the copy is well written. The entire advertisement is excellent in its power to appeal to engineers, who of course are the buying powers in this case.

**THE ADVERTISING MANAGER:**

A good advertisement. It shows a photographic illustration of the stokers in position and this illustration is connected with the sectional view at the lower part of the page. The headline is good. It says much in few words. And the copy leads naturally from the headline into concrete facts. All in all, a good advertisement.

**THE SALES ENGINEER:**

This advertisement is attractive. The man who wrote this kept his feet on the ground. The illustration and copy have selling power.



## Master and Maker of all Industry's Rubber Needs

WHEREVER industry, municipality and individual has need of rubber—there Goodrich is. A complete and precise service, not just blanketing every field of endeavor but *specializing* in every field.

Take Goodrich "LONGLIFE" Conveyor Belts, for example. In use today in thirty-three countries—on every continent of the globe—in widths, lengths, thicknesses for every conceivable type of carrying.

Further—no matter whether it be water, steam, oil, air or acid passing through a hose, Goodrich makes for the *special* call from one to a dozen brands.

And can turn out no fewer than 30,000 *different* types of moulded rubber goods!

Specialization—*precise and exacting!*

And every product known nationally—nay, internationally—for its quality!

Scan this list—see if some of these won't work thrift in your business—the advice of Goodrich experts is at your call.

"COMMANDER" Transmission Belts

"MARATHON" High Speed Belts

"WHITE KING" Fire Hose

Hard-Rubber—all Purposes

Rubber Footwear

"LONGLIFE" Conveyor Belts

"SUPERHEAT" Packing

Hose—all Purposes

Moulded Goods—all Classes

Waterproof Clothing

Tires—Pneumatic and Solid

THE B. F. GOODRICH RUBBER COMPANY  
City of Goodrich Akron, Ohio

# Goodrich

## Rubber Products

**THE PURCHASING ENGINEER:**

This advertisement is of the "supremacy" type. While it has no more direct appeal than the usual advertisement of this class, still the general make-up of the advertisement is forceful. The mixing of the appeals in this advertisement does not strike me as being particularly good. In the second paragraph a definite sales appeal is made for one particular product of the company and the rest of the advertisement goes on to tell how many other products are made. Considering the class of the periodical in which this appears, I feel that the advertisement would have been more forceful had the advertiser been content to bring up only the one point instead of attempting to cover such a large field.

**THE SALES MANAGER:**

This is an excellent example of an advertisement that is all advertising and no selling. The advertisement is presented in this trade magazine (grain trade magazine) without any respect at all for making the appeal peculiar to the readers of this particular magazine. It is a principle in advertising to make a definite appeal to the class of readers of the particular magazine in which the message appears. The advertisement on exhibition is not peculiar to any technical magazine. The appeal is absolutely general.

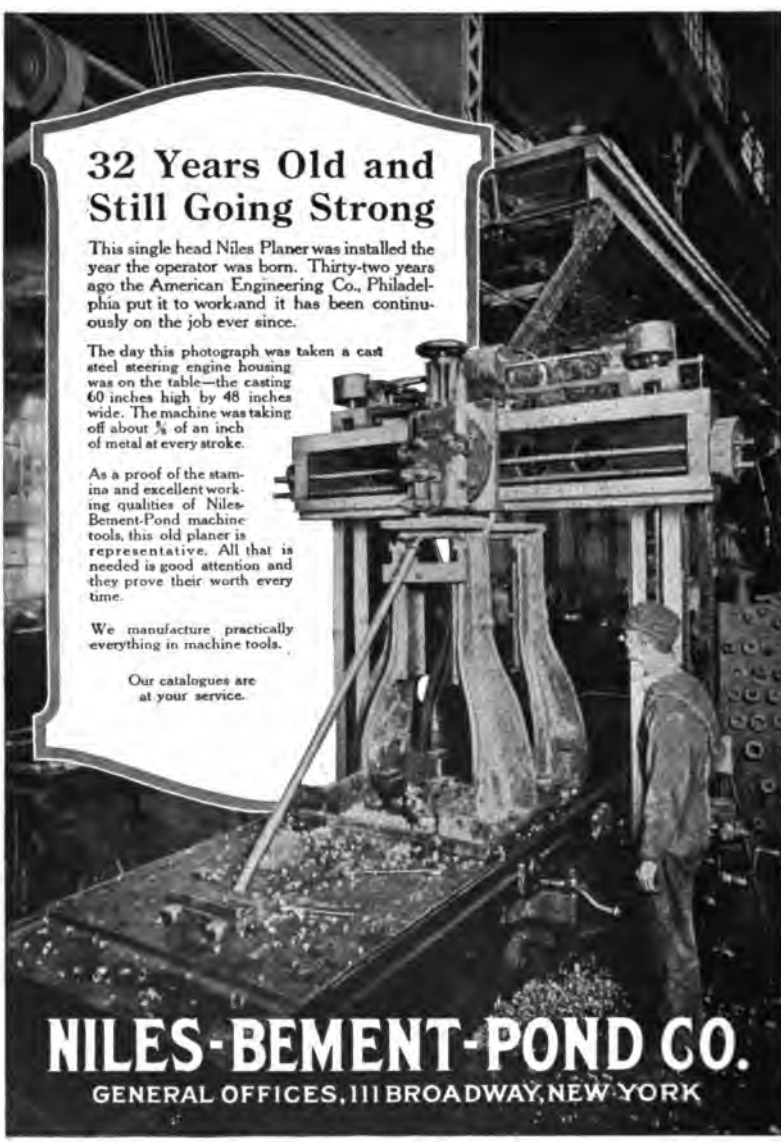
Of course the effect of this advertising is not absolutely zero because the form as presented could be called institutional advertising. However, this sort of advertising is a "lame duck," compared with the advertising that is made up to appeal to the definite and limited group of readers of the particular magazine. The grain elevators are big users of conveyor belts. Why not advertise conveyor belts? The other things could be brought in incidentally. There is too much inspiration in the copy, too little sales ammunition.

**THE ADVERTISING MANAGER:**

This advertisement might be called "Lazy Copy". This is a general advertisement. There is no definite appeal in it to the readers of the magazine. Surely, Goodrich could design an advertisement that would be specific in its appeal to the readers in this particular publication.

**THE SALES ENGINEER:**

This advertisement is well written to give publicity to Goodrich products. But Goodrich cannot afford to waste the space in technical magazines on publicity. Every reader of the technical magazines belongs to an intelligent group, and he knows that Goodrich is a manufacturer of good rubber products. Why not tell the readers of the magazine in point something about the *service* of Goodrich products *in their own field*?



## 32 Years Old and Still Going Strong

This single head Niles Planer was installed the year the operator was born. Thirty-two years ago the American Engineering Co., Philadelphia put it to work and it has been continuously on the job ever since.

The day this photograph was taken a cast steel steering engine housing was on the table—the casting 60 inches high by 48 inches wide. The machine was taking off about  $\frac{1}{8}$  of an inch of metal at every stroke.

As a proof of the stamina and excellent working qualities of Niles-Bement-Pond machine tools, this old planer is representative. All that is needed is good attention and they prove their worth every time.

We manufacture practically everything in machine tools.

Our catalogues are at your service.

# NILES-BEMENT-POND CO.

GENERAL OFFICES, 111 BROADWAY, NEW YORK

**THE PURCHASING ENGINEER:**

A good advertisement. The picture illustrates the use of the product. The *definite* statement that one of the machines was used for a *definite* length of time in a *definite* place, to my mind, makes it the strongest of the personal endorsement type of advertisements.

**THE SALES MANAGER:**

An effective introduction of the human element into an advertisement. The man who wrote this prepared himself with something to say. An excellent advertisement, because of the sales power of the material presented.

**THE ADVERTISING MANAGER:**

A good advertisement in every way. The illustration is good; it truly illustrates the copy, and the copy itself ties up with the picture.

The figure in the illustration is directing his attention toward the machine and the copy. How often we see a figure in an illustration or the whole illustration as a unit, doing all possible to direct the reader's attention away from the copy.

**THE SALES ENGINEER:**

A good advertisement. The actual photograph shows the conditions of actual operation. It is evident that this advertisement is presented to show the durability of the advertiser's planers. They very carefully have selected a casting that is not easy to machine with an old planer. The head is quite a distance from the bed, and in order to show what the machine is doing, they have stated the amount of metal removed at each stroke. The copy has plenty of selling in it, and is backed up by the actual photograph used in the illustration.



## *The Labor Saving Truck That Calls for Repeat Orders*

McKinney One-Man Trucks are easy to sell because they reduce labor expense. With this truck one man can load, haul and unload heavy and bulky packages without a single stroke of assistance and with less energy than is required by other methods. Other trucks require two or more men as loaders according to the size of the goods to be moved.

When you sell McKinney One-Man Trucks you are selling more than just a mechanical device—you are selling a service. Repeat orders are limited only by the size of the customer's business.

The McKinney One-Man Truck Service is adaptable to any kind of business. There is a truck to fit any kind of merchandise.

Look at the illustration to the right. Notice the steel arm reaching out and clasping the box. This steel arm does the work the extra loaders used to do. It is an extra pair of hands for the truckman—a distinct saving in labor costs.

McKinney One-Man Trucks are of light but rugged construction. There are no sharp points to injure the article being carried. And no matter how big, heavy or bulky the load, one man can handle it with ease.

Look into this truck proposition—this one-man labor saving system. Our illustrated booklet "THE ONE-MAN METHOD" will show you how the McKinney One-Man Truck Service will fit perfectly into any trucking situation.

McKinney Manufacturing Co.  
Pittsburgh

Western Office: State Lake Bldg., Chicago  
Export Representation



*This illustrated booklet "The One-Man Method" will show you how McKinney One-Man Trucks can be used with different lines of merchandise. It will suggest many possible sales. Copies for your salesman will be gladly sent upon request.*



*Also manufacturers of McKinney Hinges and Butts, garage and farm building door hardware and furniture hardware*

# McKINNEY *one-man* TRUCKS

**THE PURCHASING ENGINEER:**

Too much reading matter altogether. While the advertisement is good, it is presented in such a complicated way that the average reader would never wade through it.

**THE SALES MANAGER:**

A good example of an advertisement that connects up the quality of an article with the right kind of an appeal to the mill supply dealer as a business proposition. The advertisement sells the trucks as a product that will perform satisfactory service and at the same time accomplishes the weaving in of the sales points for selling the proposition as a money maker to the dealer in a successful way. The caption of the advertisement "The labor saving truck that calls for repeat orders" is good as an appeal to the dealer.

**THE ADVERTISING MANAGER:**

To my way of thinking, there is a lack of unity in this advertisement. The illustration at the top, the headlines, and the copy, all express different thoughts. The illustration conveys the thought that the use of this truck does away with the service of a certain number of men. The headline expresses the thought that the sale of one truck leads to the sale of many other trucks. The copy attempts to advertise these thoughts and at the same time introduces many other ideas.

Again, this advertisement appears in "Mill Supplies," a paper exclusively for jobbers, and dealers, and mill supply houses. The appeal of this advertisement is to these men, to sell the McKinney Truck. What jobbers or dealers are interested in, is profit. The theme or central idea of this advertisement should be profit to the dealer, that this truck is easy to sell; and that it pays a good margin of profit to the dealer.

This is conveyed in the first line of the copy itself. There is nothing, however, in the illustration, to appeal to the mill supply man, unless he were considering the use of these trucks in his own home shop. The type arrangement is good, and it is a well designed advertisement. My criticism is that it does not have the proper appeal to the readers of this magazine.

**THE SALES ENGINEER.**

The illustration used at the top of this advertisement is poor. The "memo" to the shipping department is poor. This kind of advertising is always weak in my estimation. The best illustration in this advertisement is the man using a truck in the lower right hand corner of the page.

The caption "The Labor Saving Truck that Calls for Repeat Orders" is good in "Mill Supplies." The mill supply dealer will get the idea that this is a proposition that will sell rapidly and that will bring in repeat orders. The caption could have been backed up by stating some actual repeat orders that had been secured. In other words, the caption and the copy do not quite stick together. The advertisement could have been improved by stating some of the names of the companies that sent in repeat orders.

# **SPECIALISTS IN METAL GOODS**



## **Building The Pyramids**

The Egyptians were "specialists" in Pyramids.

Nobody could equal their work.

They studied and organized and had equipment that might have startled the modern world.

Specialists usually succeed in their task.

We specialize in metal stampings.

WE HAVE SUCCEEDED THUS FAR—BUT WE STILL AWAIT  
YOUR STAMPING PROBLEMS TO PROVE OUR STATEMENTS

**— THE BRIDGEPORT —  
METAL GOODS MFG. CO.  
BRIDGEPORT, CONN.**

**THE PURCHASING ENGINEER:**

It takes too much ferreting to figure out what this advertiser has for sale. It would be impossible for me to tell from the advertisement whether the article he wishes me to buy is of the size of an automobile body or of the size of a postage stamp. The picture shown would indicate the latter, but it would be hard to tell from anything stated in the advertisement *what* he had for sale.

**THE SALES MANAGER:**

This is a very poor advertisement. It lacks coherence. The photograph is poor. The advertisement is badly balanced. There is no sales ammunition in the advertisement.

**THE ADVERTISING MANAGER:**

Just how the line "Building the Pyramids" is a suitable caption for the picture of a machine shop, is a bit beyond me, but I'll confess the ways of a copy writer with pencil and paper and an idea are indeed peculiar. The thought of this advertisement is this: This company specializes in stampings. Specialists usually succeed. Therefore the B.M.G.M. Company succeeds. Yes, but in what, pray tell? In making better stampings, in making cheaper stampings, in making special and "hard to make" stampings or *what*?

And what is the picture a picture of? Is it an interior view of the B.M. G.M. Company or a picture of some shop where the B.M.G.M. Company stampings are used? The caption would lead one to believe that the picture illustrated the making of pyramids. And those last two lines, "We have succeeded thus far, etc." Oh, how clever? Oh, how brilliant? I can just imagine the writer of this advertisement pulling his hair and smoking Fatimas, while an adoring stenographer looks on in mute admiration. Finally, comes the inspiration for those last two lines. He dashes them down on paper. The A. S. copies them and the stuff is mailed.

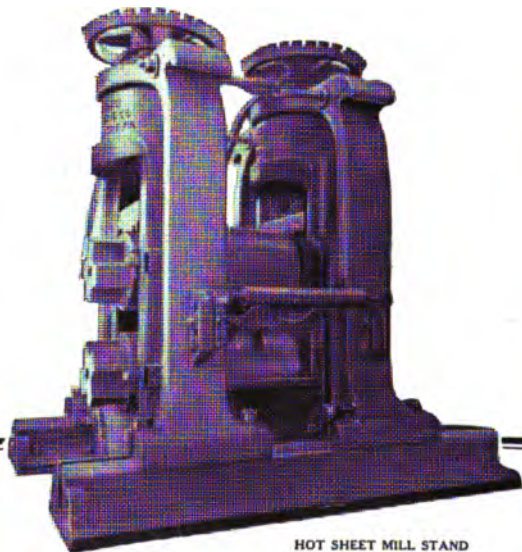
This advertisement is an excellent example of how not to do it. There is absolutely no sales argument advanced. If there is one, it is carefully hidden, carefully veiled, lest some reader, after studying the advertisement for an hour or so, might find it.

**THE SALES ENGINEER:**

This is not a very good advertisement. I believe that they could have accomplished the same with about one-fifth of the space. To start with, the illustration does not impress the reader with the name of the company. It is just an ordinary factory, from all that this cut shows. It could be a shoe-factory, a shirt-waist factory, as much as it is a metal goods factory. The copy is entirely void of selling. It tries to put across the fact that they specialize in metal stamping. This is weak, because to a certain extent every body specializes in something that he is trying to sell. The advertisement should be backed up with some actual information. One cannot tell what kind of stampings they are in a position to make, or how large or small the stampings are.



# STANDARD ENGINEERING COMPANY



HOT SHEET MILL STAND

Our renown as manufacturers of Rolling and Tube Mill Equipment has not spread beyond the areas where our equipment is in use.

Yet today there is not an industrial country on the globe where the Standard Engineering Company is not known.

Because our products are used, and praised, wherever Mill Equipment is necessary, whether in Japan, Europe, or our own land.

**STANDARD ENGINEERING CO., Ellwood City, Pa., U. S. A.**

Pittsburgh Office: Granite Building

**THE PURCHASING ENGINEER:**

The picture of the mill shown here gives the impression of strength. The argument is concise. I believe this to be a good advertisement.

**THE SALES MANAGER:**

This is a fine example of good form. It might have been a good advertisement, if only some real sales ammunition had been put into the advertisement. The advertisement stands out among the other advertisements in the magazine because of the illustration and effective use of white space. The illustration is very good, the advertisement is well balanced and the copy is well written and displayed. However, the copy has no place in technical advertising literature; at least, it has a very small place. The advertising copy in this case lacks definiteness, because evidently the writer, who is a good writer, did not have at hand any real sales ammunition to put into his message.

**THE ADVERTISING MANAGER:**

This advertisement might be classed as a "business card." It is simple, well-ordered, well-worded business card. It illustrates one type of the machine the company manufactures and states that his product is everywhere known and well thought of. Possibly this is about all that this company can say for itself; about all it can advance as a sales argument, but I doubt it.

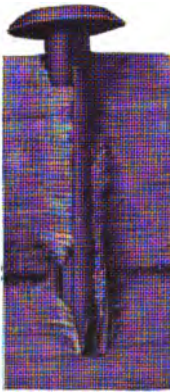
There must be some reason why the Hot Sheet Mill Stand as illustrated, is better than some others. There must be one or two features about it that are exclusive with the Standard Engineering Company. I venture the statement that an advertising man with a "nose for news" could walk through that plant and obtain material for several advertisements, material that would have in it some good sales argument. As it stands this advertisement is a business card and nothing more. The name of the company might be changed to that of some other engineering company and the advertisement would do for the second company as well as for the first.

**THE SALES ENGINEER:**

The illustration used in this advertisement is good. The copy is exceedingly weak. The advertisement could have been improved by showing a photograph of an actual mill installation and then picturing in the foreground the mill stand shown in this advertisement. Even if the photograph of the actual installation had been omitted this advertisement could have been improved by some real data in the place of the copy used. The small thought that they have tried to put across in the copy seems to me could have been told in one paragraph of about three lines. As the number of prospects for mill stands is very limited, I should suggest that this company run very few full page advertisements on them in the magazines. The advertisements are justified of course in order to advertise the Standard Engineering Company as builders of this type of equipment. More direct results could be accomplished, however, by direct mail treatment with prospects.

# Cos

## Sessler Grip Spikes are



See how the Sessler Grip Spike cuts, yet locks the wood fibres, increasing their holding power. Driven without prebored hole. Pictures reproduced from Columbia University Engineering Laboratories Test Bulletin.

- An average of 42% stronger than the cut spike under all conditions in both soft and hard woods.
- Much stiffer in initial holding power, where holding power is most needed, than cut or screw spikes.
- Designed so that they do not crush or break down the wood fibres in driving. (note photographs.)
- Redriven but once, if at all, while the cut spike needs redriving three times.

Compiled from published reports of the Engineering Laboratories of Columbia University.

*"Improves the track*

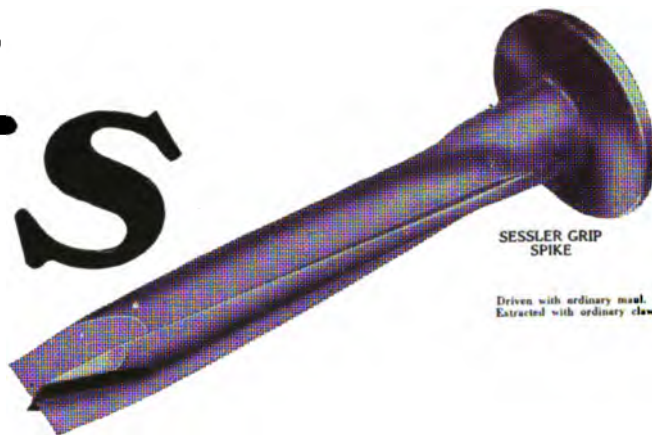
**AMERICAN SP**

**INCORP**

**55 LIBERT**

**NEW**

ts



SESSLER GRIP SPIKE

Driven with ordinary maul.  
Extracted with ordinary claw bar.

What is your cost per mile per year for spikes?  
What is your cost per mile per year for ties?  
What is your cost for maintenance for both?  
Sessler Grip Spike reduces ALL these costs.

*and saves the tie*

**IKE COMPANY**

ORATED

Y STREET

YORK



Note effect of driving without  
prebored hole, common cut  
spike, through wood fibre

(NOTE: These criticisms refer to the double-page advertisement reproduced on the two preceding pages.)

**THE PURCHASING ENGINEER:**

A good advertisement. The two small pictures on the sides tell the whole story of why the product is better than the generally used article. The sales argument is concise. The small pictures shown on this advertisement will remain in the mind of a prospective buyer much longer than any written argument that could be given.

**THE SALES MANAGER:**

Very good illustrations. The sales message is good. The advertisement has sales force. However, it strikes me that the advertisement is very poorly balanced.

**THE ADVERTISING MANAGER:**

This advertisement has all the component parts that go to make up a good advertisement but these parts are so poorly arranged that the advertisement appears spotty.

An advertisement is in many respects like a picture puzzle. All parts must be in their proper place or else the picture is not complete.

**THE SALES ENGINEER:**

A first class advertisement. The double space used and caption "Costs" certainly secure the attention. The advertisement is very good from a sales standpoint. The small cut showing the effect of the ordinary spike as compared with the new spike is very convincing. The authority for this data is also given. This backs up the complete copy, and cancels all chance for doubt in the prospect's mind.

(NOTE: These criticisms refer to the double-page advertisement reproduced on the two following pages).

**THE PURCHASING ENGINEER:**

This is another of the testimonial or personal endorsement type of advertisements. To my mind, this one falls down on several points. In the first place, the name of the man used is not well known enough to inspire any general confidence, although the firm's name is, of course, well known. Had the general manager of this concern endorsed the advertised product, the effect would have been very much stronger. In the second place, great detail is gone into in telling how many pieces were finished on the machine in a given length of time, but the very important point, which any shop man would want to know is omitted; namely, the limits to which the pieces were finished. To my mind, this weakens the sales argument to such a degree as to render it almost valueless from a direct selling standpoint.

**THE SALES MANAGER:**

This advertisement is provided with excellent sales ammunition, a statement by the foreman of a well-known company recommending the product of the advertiser. The advertisement goes on to back up this statement with the reason why he made it and with some details of the work. On the left hand side is shown the shop in which the actual operations took place and a photograph of the machine. Convincing advertisement.

**THE ADVERTISING MANAGER:**

Not a bad advertisement. There is an illustration of the machine, the machine in operation, and definite facts are given as to just what the machine did under certain conditions.

The copy to represent hand writing could have been brought out a bit better. And, if I were preparing this advertisement, I should have made the head line read, "Mr. Pichette said" rather than "Speaking of Automatics."

**THE SALES ENGINEER:**

I regard this advertisement as being very good. The illustration is good. The picture of the shop takes the production man immediately to his own shop and conditions. As the machine itself is shown below this illustration, the purchaser has an excellent chance to study the machine to the limits of a photograph. On the next page the reader has the opinion of a man who is foreman of an automatic department. If a man actually comes out in print with this statement the reader is inclined to believe that there is certain proof of the results secured. These results are not superficial, but are actually detailed in the advertisement. In addition to the various operations the class of steel on which the work is performed is also stated. I should imagine that a man interested in production would secure considerable information from this advertisement, which would lead him to send blue prints for data as suggested. I think that the advertisement commands attention, and it also has plenty of selling contained in it. There is nothing boastful about it.



**5A Model—6A Model—7A Model**

# Speaking of Automatics.

*"I believe P & Js  
are the best for  
handling Forgings,  
Castings and Sawed  
Bar Stock" —*

Those are the words of A. J. Pichette, foreman of the Automatic Department of the New Process Gear Corporation, Syracuse, N. Y. And here are some of the P & J results on which he bases that belief.

Bevel Drive Pinion from Forgings, 3½ per cent nickel steel, are being made. Center drill, drill and rough face back, rough taper ream, finish taper ream and finish end face are the operations.

The pinions are chucked on the outside diameter and each P & J turns out 10 pinions per hour. One operator runs two machines.

It is more than likely that on some of *your* work the operator can handle three or more P & J's. Even six machines are often handled by one man.

*Why not send us blueprints for data pertaining to your work?*

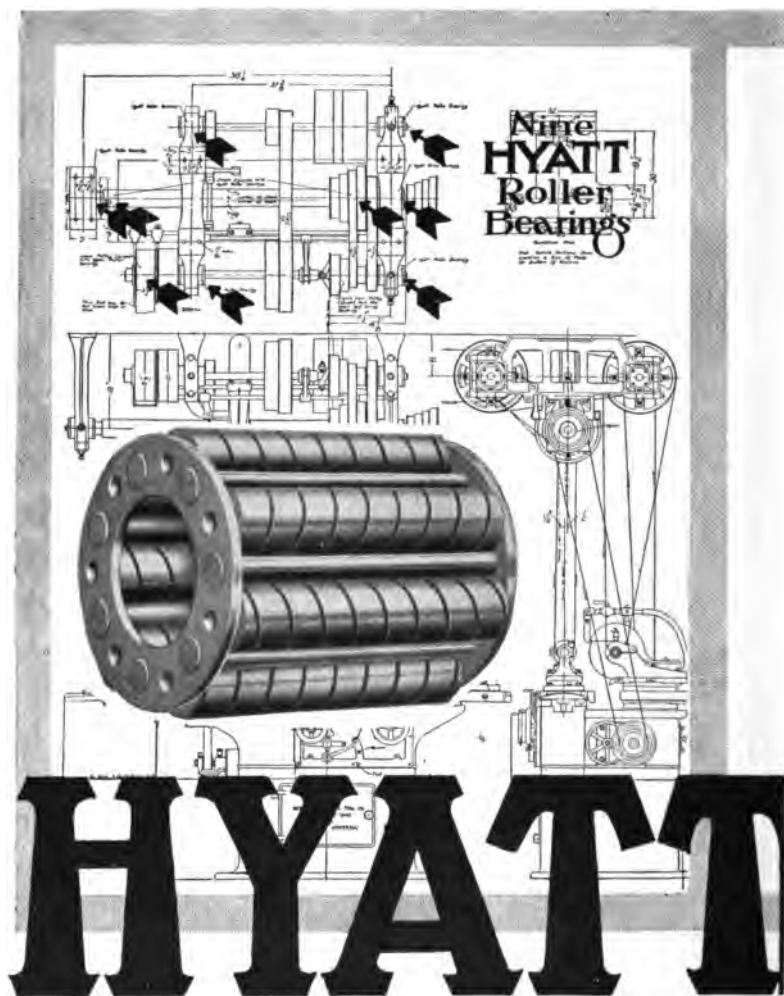
## POTTER & JOHNSTON

Pawtucket, Rhode Island, U. S. A.

New York Office, Fulton Bldg., 80 Church St., Walter  
E. Potter, Manager. Detroit Office, Rodgers Building  
Manufacturing Co., 1114 Ford Bldg. Chicago Office,  
Cull, McGinnis, 1114, Chase, 11th Floor. Boston  
Toronto Office, 1361 Royal Bank Bldg. E. C. Marshall,  
Manager. Foreign Office and Superintendence,  
Office for Great Britain, France, Italy, Belgium, Swit-

zerland, Spain and Portugal, Potter & Johnston Ma-  
chine Co., 50 Ave. de la Grande Arrière, Paris, France.  
J. Egan, Manager. Chas. Churchill & Co., Ltd., Lion  
Bldg., Birmingham. Maschinen- und Werkzeugfabrik, J. von  
Rottmann and Glasner, Neustadt. Wrobley, Wright, Corrie  
Pavia, Gova, 21 Milan Italy. R. von L. & A. von  
Stockholm, Sweden.





Reprint from *Machinery*, January, 1919

## "We Were Looking for the Best Bearings We Could Find—

### We Chose HYATT Roller Bearings"

The Webster & Perks Tool Company of Springfield, Ohio, uses nine Hyatt Roller Bearings in the countershaft of their new Universal grinding machine. Here is the reason—quoting the designer, Mr. Mitchell—

"We were looking for the best bearings we could find—we chose Hyatt Roller Bearings."

As a matter of service to their customers, progressive machine tool manufacturers are standardizing on Hyatt Roller Bearings. They know as does Mr. Mitchell the increased production that the power saving, lubricant saving, maintenance saving advantages of Hyatt Roller Bearings make possible.

Send for our complete engineering data on Hyatt Roller Bearings for machine tools.

**HYATT ROLLER BEARING CO.**  
Industrial Bearings Divisions  
Metropolitan Tower, New York

Motor Bearings Division Detroit, Mich. Tractor Bearings Division Chicago, Ill.

Manufacturers of bearings for auto cars, ore cars, steel mill cars, roller tables, lathes, cranes, hoists, machine tools, line shafts, waterwheels, conveyor mechanisms, textile machinery, sawmills, lift trucks, industrial trucks, rolling mill cars, storage battery locomotives, etc.



# ROLLER BEARINGS

(NOTE: These criticisms refer to the double-page advertisement reproduced on the two preceding pages).

**THE PURCHASING ENGINEER:**

I am rather uncertain what to say about this advertisement. My feelings in the matter are mixed. On the left hand side of the page is shown a diagram which is decidedly complicated when one attempts to figure it out. However, I figure that the advertiser did not expect his reader to go into the detail of the advertisement. He expected only to convey one point; namely, that there are many places where this type of bearing could be used. The right hand sheet of the advertisement to my mind is much stronger, as it shows an actively suggestive picture of a man applying the bearing to the use suggested in the advertisement. However, I still insist that there is more printing here than is necessary.

**THE SALE MANAGER:**

This is an excellent advertisement in that it accomplishes very effectively the three-fold purpose of an advertisement in one without depreciating to any extent the effectiveness of any one of the three elements. The advertisement accomplishes publicity for the bearing. It accomplishes the advancement of the bearing as a good bearing among competitive bearings. And, finally, it sells the bearing for a particular application.

The illustration on the right has a strong appeal to the shop man in that it shows him actual, practical detail. The particular application is dramatized by the use of the illustration showing the man actually inserting one of the bearings. We have here an effective use of just a part of the body to dramatize an application instead of a full figure. I believe that this use of just part of the figure, the hands and arms, accomplishes better dramatization and a better use of space than the whole figure. The attention is beautifully concentrated on the application of the bearing.

The illustration of the bearing itself on the left is bold and effective. It sells the bearing itself; that is, the detailed construction of the bearing. The tying up of the application with the name of a customer who actually has applied the bearing in the particular application is good. It is an important element of definite sales suggestion to influence people to buy because others are buying.

**THE ADVERTISING MANAGER:**

This advertisement is a conglomeration of spots. There is nothing about it that connotes quality. The lay-out is very poor. The big sign board at the bottom of the page is out of place; it belongs on the side of a building.

**THE SALES ENGINEER:**

This is a good advertisement because it contains the details that are really necessary to sell the prospect who stops to read. If the reader is not interested in these details, he at least cannot pass the advertisement by without having had induced by it two or three reactions associated with the product and the manufacturer's name.

## CHAPTER XXIII

### BIBLIOGRAPHY

Advertising literature—Advertising as a business force—Advertising, its principles and practice—Advertising and selling—The psychology of advertising—Writing an advertisement—Principles of advertising arrangement—Typography of advertisements—Trade marks—House organs—Statistics and graphic methods.

#### ADVERTISING LITERATURE

There is little literature relating to the advertising of technical products. There are no books that specialize on the subject. However, there are many good books on advertising in general that can be studied profitably for the sake of the advertising principles they teach. Advertising the technical product successfully and economically really depends on the correct application of these same principles, properly adapted to suit the peculiarities of the special problem.

The books described in the following list all deal either with these general principles or with the application of some of these principles to advertising. The descriptions of the books were all written for this bibliography by the respective publishers.

#### ADVERTISING AS A BUSINESS FORCE

ADVERTISING AS A BUSINESS FORCE, BY PAUL T. CHERINGTON.

Advertising as a great commercial power—a sort of E.M.F. in the science of modern business, is the theme of Paul Terry Cherington's new book. It is not theoretical and *a priori* in any sense, but a deductive treatment, based on the known facts of present-day commercial life. Mr. Cherington has drawn upon the results of successful advertisers for his conclusions—all classes of business have been studied to discover How and Why publicity helped them. The result is a formulation of principles which every business man can understand and apply in his own field. This is the first attempt to set before the advertiser on the one hand the problems which confront him,

and on the other the solutions of successful advertisers. Published by Doubleday, Page and Company, New York.

THE FIRST ADVERTISING YEAR BOOK, BY PAUL T. CHERINGTON.

Every one in the great and changing field of advertising and publishing has felt the need of an authoritative Year Book in Advertising, in which could be found the facts of advertising development. *The First Advertising Year Book* will fill that need. This issue presents in easily available form those articles, addresses, and other productions on advertising which have appeared during the year which are the most important contributions to the year's advertising history. A great deal of the power of this book lies in the fact that it deals with *actual experiences*. It deals in facts, not theories, and the author's sources of information are authoritative. Published by Doubleday Page and Company, New York.

ADVERTISING—SELLING THE CONSUMER, BY JOHN LEE MAHIN.

Newsboy, printer, bookkeeper, reporter, editor, advertising solicitor and executive head of a national advertising agency—this, in brief, is the background of practical experience to Mr. Mahin's work. *Advertising—Selling the Consumer* is the outgrowth of a series of notable lectures delivered by the author before Northwestern University. It presents a comprehensive survey of the organization of modern advertising through which it serves its great function of "Selling the Consumer." Every one is affected by advertising and this book describes how advertising is practiced. The present edition is entirely revised and brought up to date with much new material added. Published by Doubleday, Page and Company, New York.

HOW TO ADVERTISE, BY GEORGE FRENCH.

Here, at last, is a practical Manual and Guide on "How to Advertise." The potentiality of advertising is one of the most amazing features of our civilization, and yet the waste in this field is not less appalling. Mr. French probes the causes of this waste and shows how to build advertisements that "get results." He avoids the pit-falls of generalities, and drives home his points with concrete examples of advertisements that have made or missed their mark. The thorough treatment of every aspect of the subject recommends this book as a work of reference and of fresh ideas for every one whose business bears in any way upon advertising. Whatever may be said of the tremendous importance of various phases of advertising, it must also be remembered, at all times, that the technique of advertising is both engrossingly interesting and vitally important—that thousands and even millions of dollars are wasted through just such errors as this book identifies—money that will, in part at least, be saved through the study of such works as this. Published by Doubleday, Page and Company, New York.

## ADVERTISING, ITS PRINCIPLES AND PRACTICE

ADVERTISING—ITS PRINCIPLES AND PRACTICE.

By Harry Tipper, Ex-President of the Advertising Club of New York; H. L. Hollingworth, Ph. D., Associate Professor of Psychology at Barnard College; George B. Hotchkiss, M. A., Professor of Business English and Head of the Marketing Division in New York University; Frank Alvah Parsons, B. S., President, New York School of Fine and Applied Art.

This book combines the specialized view points of the four authors—market analysis, applied psychology, copy structure, and effective display. It covers the economic and psychological features of advertising; how to analyze markets; preparation of effective copy; layouts and design; periodical mediums; policies and fields; printing, type, color, and arrangement; how the campaign is planned, etc. Numerous illustrations—some in color—carefully chosen from actual practice, supplement the text. 597 pages, flexible binding, price \$6.00. Published by the Ronald Press Company, New York.

ADVERTISING, BY DANIEL STARCH, PH. D., UNIVERSITY OF WISCONSIN.

The principles, practice, and technique of advertising are explained by Dr. Starch, who has designed the book as a first textbook for students and as an introductory handbook for business men. He has succeeded in his purpose to "combine the practical and the theoretical aspects of the subject" in such a way that the practical experiences of the business houses may illustrate the underlying principles. Problems of advertising policies and plans, and the construction of advertisements are given. There are many illustrations. Every advertiser, business man, and advertising writer should have a copy of this valuable book. Published by Scott, Foresman and Company, Chicago and New York.

PRODUCTIVE ADVERTISING, BY HERBERT W. HESS, PH. D.,

Assistant Professor of Advertising, University of Pennsylvania.

*Productive Advertising* creates in the reader what might be termed a real advertising consciousness. It explains the "why" and "wherefore" of the principles involved in all phases of advertising and sets forth the "how" of their practical application. It answers hundreds of questions in a concise, clear, yet comprehensive way. The theory and practice of advertising are harmoniously blended in this volume. For this reason it is of value not only to the young advertising man, but to the expert, to the managing executive of a big business, and to the man who runs his own business. To the latter it is an absolute necessity. A study of this book will show you how to make your advertising pay. 360 pages, 85 charts, diagrams and illustrations, showing in detail the preparation of copy, cuts, etc. Bound in strong buckram binding. \$3.50 net. J. B. Lippincott Company, Publishers, Philadelphia.

THE BUSINESS OF ADVERTISING, BY EARNEST E. CALKINS.

Mr. Calkins is one of the foremost figures among the successful agency men in the country, and, therefore, it is not surprising that this work of his should be especially characterized by practicality. The book gives actual and graphic cases of the employment of modern publicity methods. The author, among other things, points out the significances of a trade-mark, of the pertinence and scope of advertising, and numerous other things as well, including the conception of copy, its publication and circulation. Many illustrations demonstrate the author's contentions. Published 1915; pages 337; appendices 4; index. Published by D. Appleton & Company, New York.

ADVERTISING, BY CARROLL D. MURPHY, CHARLES E. CHURCHILL, THOMAS RUSSELL, AND OTHERS.

A "key book" that treats separately each phase of this important subject. Each of the 24 chapters is written by a man most intimate with his particular problem. It gives you details of successful advertising plans and campaigns, for it tells specifically how to find the point of contact—when to use magazine space, newspaper space—the value of novelties—out-door advertising—how to prepare "copy" that sells—how to edit a house organ. 216 pages; size 5½ inches by 8½ inches; bound in standard crimson cloth. Illustrated. Net, \$2.50. Published by A. W. Shaw Company, Chicago.

### ADVERTISING AND SELLING

ADVERTISING AND SELLING PRACTICE, BY JOHN B. OPDYCKE.

Specialist in Advertising and Sales Training.

Here is a book that contains much valuable information which every business man may apply to his business with profit. It digs down deep into the fundamental principles of advertising and selling and shows by concrete example their correct application to the advertising and selling problems of modern business. Especially will this book be found helpful to ambitious junior employees who are anxious to master the details of these two important branches of merchandising. At the end of each chapter are theoretical problems that find their parallel in today's business, for the reader to work out himself. Many business men have found it profitable to purchase several copies of this book for circulation among their employees. 230 pages; sizes 5½ by 8½ inches, bound in standard blue cloth. Net, \$3.00. Published by A. W. Shaw Company, Chicago.

ADVERTISING AND SELLING, BY HARRY L. HOLLINGWORTH.

This present (1920) publication is the ninth printing the book has undergone, which indicates significantly the appreciation that it has found. Keen analysis and lucid exposition are the distinguishing features of the volume. Among the subjects the author deals with are the merit of position in a given medium, the potency of attention-arresters and absorbers, the standard curve of forgetting, etc. Professor Hollingworth is Associate Professor of Psychology in Columbia University, New York City, and is the author of several other successful books. His book is copiously illustrated. Published 1920; pages 305; references; index. Published by D. Appleton and Company, New York.

ADS AND SALES, BY HERBERT N. CASSON.

The first attempt to apply the principles of Scientific Management to the problems of Sales and Advertising. It is estimated that the total advertising in the United States amounts perhaps to *five million dollars* a day, and the total Sales, in the home market alone, to over *one hundred million* a day. Consequently the tremendous importance of efficiency in the selling and advertising of goods, can best be realized. Too much of our work has

fallen into ruts of habit and routine; and it is the purpose of this book to point out that there is a *better way* to do what we are doing. Published by A. C. McClurg and Company, Chicago.

**MORE SALES THROUGH ADVERTISING, EDITED BY THE SHAW BUREAU OF BUSINESS STANDARDS.**

Describes in detail the exact advertising methods and plans used by progressive business men to stimulate their sales, increase their profits, and build bigger, stronger organizations. It covers every important detail of advertising, from the fixing of appropriations to the preparation of house organs that bring in new business. It also points out by contrast ineffective advertising methods, schemes, and plans, and will help you to cut your costs by enabling you to avoid advertising which is weak and non-productive. 200 pages: size 5½ inches by 8½ inches: bound in standard crimson cloth, gold stamped. Illustrated. Net, \$3.50. Published by A. W. Shaw Company, Chicago.

**THE PSYCHOLOGY OF ADVERTISING**

**THE PSYCHOLOGY OF ADVERTISING, BY WALTER DILL SCOTT, PH. D.**

A practical book, based on facts, painstakingly ascertained and suggestively compared. The author is Associate Director of the Bureau of Salesmanship Research, Carnegie Institute of Technology, Director of the psychological laboratory of Northwestern University, and former President of the National Association of Advertising Teachers. Half leather, 8 vo. With illustrations from advertisements. Net, \$2.25. Published by Small, Maynard and Company, Boston.

Contents: I, Introduction; II, Memory; Remembering and Forgetting; III, The Feelings and the Emotions; IV, Appeals to the Customer's Sympathy; V, Human Instincts; VI, Suggestion; VII, The Will: An Analysis; VIII, The Will: Variety in Action; IX, Habit; X, The Habit of Reading Advertisements; XI, The Laws of Progressive Thinking; XII, Attention Value of Small and Large Spaces; XIII, Mortality Rate of Advertising; XIV, The Psychology of Food Advertising; XV, The Unconscious Influence in Street Railway Advertising; XVI, The Questionnaire Method Illustrated by an Investigation upon Newspapers; XVII, Bibliography of Advertising.

**ADVERTISING AND ITS MENTAL LAWS, BY HENRY FOSTER ADAMS, PH. D.,**  
Instructor in Psychology, University of Michigan.

This book, intended for students of the psychology of advertising endeavors to accomplish three things: First, to present in simple language the basic facts and principles of psychology that are related to advertising and to point out the application of the principles. Second, to reduce the complexity of a printed advertisement to its elements and to show with mathematical exactness the effect of the various elements. This has been done in large measure by devising experiments to test the effect of one factor in isolation, then the effect of a second, a third, etc. The book, consequently, is an endeavor to put the Psychology of Advertising on a quantitative basis, a strictly scientific basis. Third, the results of the experiments which have been carried on in the laboratory have been com-



pared with the results of actual advertising campaigns in which similar problems have been involved and it has been found that the relationship between the business test and the theoretical test is strikingly close. Published by Macmillan Company, New York.

**THE THEORY AND PRACTICE OF ADVERTISING, BY WALTER DILL SCOTT.**

This is not a book of mere theorizing. It is practical in every way. Every principle stated by Professor Scott has been subjected to practical and searching tests in his psychology classes, with whom for several years he has been devoting especial attention to the study of advertisements and advertising methods, carefully tabulating the results of his investigations and the effects produced by various advertisements upon hundreds of different individuals. The general principles are so clearly and so broadly laid down that their application to any business or to any kind of product is easy. Svo. Half leather, With illustrations from advertisements. Net, \$2.25. Published by Small, Maynard and Company, Boston.

Contents: I, The Theory of Advertising; II, Attention; III, Association of Ideas; IV, Suggestion; V, The Direct Command; VI, The Psychological Value of the Return Coupon; VII, Fusion; VIII, Psychological Experiment; IX, Perception; X, Apperception; XI, Illusions of Perception; XII, Illusions of Apperception; XIII, Personal Differences in Mental Imagery; XIV, Practical Application of Mental Imagery; XV, Conclusion.

**INFLUENCING MEN IN BUSINESS, BY WALTER DILL SCOTT.**

A study of the practical problems of psychology as applied to every day business problems. Designed for any one whose business success depends in any way on persuading men and directing their actions, especially managers, salesmen, and advertisers. It takes up the simple laws by which men think and act; shows how to make men think your way and how to put your proposition before them in a way most likely to induce favorable action. 168 pages, cloth binding, price \$2.00. Published by The Ronald Press Company, New York.

## WRITING AN ADVERTISEMENT

**WRITING AN ADVERTISEMENT, BY S. ROLAND HALL,**

Organiser of the Schools of Advertising and of Salesmanship, International Correspondence Schools.

This book, written by an advertising expert who has had practical experience in every branch of the work—writing, advising, financing, and teaching—is an analysis of the methods and the mental processes that play a part in the writing of successful advertising. The essential fundamentals of advertising are presented in a readable, non-technical fashion that is stimulating and instructive. The subject is dealt with from the point of view of effectiveness of copy, and the book is practical rather than theoretical, as Mr. Hall's ideas have been tested in the laboratory of actual advertising campaigns. The volume deals with such questions as the study of the article to be advertised; the inside and outside points of view; the interest value and the new element in advertising; the appeal of pictures; how to

dress up the idea; and some observations of the cumulative effects of advertising, with certain tests that may be applied. To the man far advanced in the profession as well as to the novice, the author presents much matter of more than passing interest. Published by Houghton, Mifflin Company, Boston.

## PRINCIPLES OF ADVERTISING ARRANGEMENT

PRINCIPLES OF ADVERTISING ARRANGEMENT, BY FRANK ALVAH PARSONS,  
President of the New York School of Fine and Applied Art.

This book was based upon a course of lectures given before the Advertising Men's League of New York. All the charm of Mr. Parsons' conversational style, abounding with simple illustrations, has been retained and the text matter illustrated with many cuts, three pages being in color. It is not only a book of inspiration but a "Service Book" that you will refer to day by day. It teaches principles that are fundamental and practicable. It is profusely illustrated and beautifully printed with a decorative border about each page. Bound in Italian Hand-made Paper Boards. The book is itself a unique example of effective typography. Published by The Prang Company, New York.

## TYPOGRAPHY OF ADVERTISEMENTS

TYPOGRAPHY OF ADVERTISEMENTS THAT PAY, BY GILBERT P. FARRAR.

The author, as an advertising expert, has had years of experience in handling types, which accounts for his clear and understandable method of presenting his subject. No longer need any advertising man or printer guess at the kind of types to use for advertisements of any description. Every step in constructing an advertisement is described and illustrated, with 149 examples. The size and sort of type faces for certain classes of advertisements is a matter of paramount importance—this Mr. Farrar shows and proves. Published, 1920; pages, 282. Published by D. Appleton & Company, New York.

MAKING TYPE WORK, BY BENJAMIN SHEEBOW.

A new and authoritative book, with a fresh view-point, for all men interested in advertising, publishing and practical printing—for all men interested, in whatever capacity, in obtaining the maximum business result from the printed word. This book embodies the results of a dozen years spent in working out practical problems of advertising and other typography—from the laying out of complete advertising campaigns to the establishing of typographical styles for national magazines. "Making Type Work" contains a clear and memorable statement of the basic typographical principles used by the author. Illustrated at every point—by the choice and arrangement of the type in the text of the book itself, by reproductions of advertisements, by different arrangements of the same piece of advertising text, etc. 12 mo. 130 pages. Profusely illustrated. Price \$1.25. Published by The Century Company, New York.

## TRADE MARKS

## GOOD WILL, TRADE MARKS AND UNFAIR TRADING.

Good will is a considerable asset to every business to-day. How to increase business through good will, as well as how to appraise good will, forms the subject of the first part of this book. The author then devotes ten chapters to trade-marks, giving the reader valuable suggestions how legally to safeguard his trade-mark. The rest of the book deals with the methods of defending a business from unfair competition, explaining what constitutes infringement and how to prevent it. 288 pages; size 5- $\frac{1}{2}$  inches by 8- $\frac{1}{2}$  inches: bound in standard crimson cloth, gold stamped. Illustrated. Net \$4.00. Published by A. W. Shaw Company, Chicago.

## HOUSE ORGANS

## EFFECTIVE HOUSE ORGANS, BY ROBERT E. RAMSAY.

The author of this book is the Editor of the publication *Advertising & Selling*; is President of the Direct Mail Advertising Association; and is Chairman of the Division of House Organ Editors, of the Associated Advertising Clubs of the World. This book will not only prove invaluable to the concern about to commence publishing a house journal, but will also be of stimulating assistance to those who are already editing such a paper by its citations from the experience of others in the field, and its presentation of comparative standards of cost, circulation, scope, value, etc. Published 1920; pages 316; appendices 6; index. Published by D. Appleton & Company, New York.

## STATISTICS AND GRAPHIC METHODS

## STATISTICS IN BUSINESS, THEIR ANALYSIS, CHARTING AND USE, BY HORACE SECRIST.

Professor of Economics and Statistics, Northwestern University; formerly Statistician, United States Shipping Board.

The successful executive is one who can analyze the fundamental factors in his business and measure their influence. This book shows him what are the important factors and how to appraise them. It shows him the importance of applying the scientific method to the complex problems of modern business. If you have ever been tempted, when looking over a summary, a report, or a chart, to say, "Well, just what does it mean?"—you will appreciate this book. 130 pages, 5 $\frac{1}{4}$  × 8, illustrated. \$1.75 net, postpaid. Published by McGraw-Hill Book Company, New York.

## GRAPHIC METHODS FOR PRESENTING FACTS, BY WILLARD C. BRINTON, CONSULTING ENGINEER.

"Graphs" give to the eye in a moment an idea which is much less vividly conveyed by slower verbal processes of explanation and comparison.

The executive can receive daily and periodical reports of business operations. The statistician presents his conclusions to clients and to the public.

The sales manager can follow the work of his superintendents and the operations of competitors.

Mr. Brinton's book performs the novel and unique service of classifying all the serviceable methods of graphic presentation, with a discriminating criticism pointing out the uses and effects of each, leading up to a widely adoptable standardized method suitable for both immediate and permanent record and a code of invaluable cautions and suggestions applicable to any method. Price, \$5. Published by Engineering Magazine Company, New York.

**COMMERCIAL RESEARCH, BY C. S. DUNCAN, PH.D.**

Assistant Professor in Commercial Organisation, School of Commerce and Administration, University of Chicago.

A book dealing with the methods of establishing and interpreting business facts. Published by the MacMillan Company, New York.



## INDEX

### A

Accessory, example for an, 60  
 Accuracy, in all forms, 223  
     technical, necessary, 232  
 Action, 235  
 Advance sales, 170  
 Advertisements, criticisms of, 297  
     preparing the ideal, 55  
 Advertising,  
     agency, 268  
     ammunition, 179  
     appropriation, the, 67  
     counsel, 268  
     department, the, 257, 263  
     development, 7  
     direct-mail, 126  
     economical and uneconomical,  
         12  
     form, elements of, 82  
     forms that are called, 10  
     institutional, 86  
     manager, the, 258  
     national, 66  
     needs, 4  
     a potential science, 3  
     the product to the market, 54  
     technical products, conditions  
         peculiar to, 11  
 Agency, advertising, 268  
     compensation, 269  
     services rendered by the, 268  
     the technical, 271  
 Ammunition, advertising, 179  
     suggestions for, 184  
 Analyse, when to, 29  
 Analysing, the component markets,  
     38  
     the product, 26  
 Analysis, market, 34  
     the sales engineer's, 53

Appeal, the dramatic mass, 106  
     the editorial, 103  
     human interest, 243  
     to the particular market, 54  
     suiting the, to the product and  
         medium, 122  
 Appearance of direct-mail pieces,  
     128  
 Applications of the product in sub-  
     divisions of the industries,  
     37  
 Appropriation, advantages of a de-  
     finite, 71  
     the advertising, 67  
     the factors the, is based on,  
         68  
     methods of making up the,  
         67  
     percentage of the, to sales vol-  
         ume, 69  
 Arrangement, 224  
 Art department, 277  
     work, cheap versus high grade,  
         208  
 Attention, 235  
     required in service, 30  
 Authenticated tests, 185

### B

Bibliography, 349  
 Blotters, 132  
 Blue-prints, 220  
 Booklets, 137  
 Borders, 224  
 Broadside, the, 136  
 Budget, the, and the mediums, 85  
 Bulletins, 143, 147  
 Buying habits, 37  
     of the group, 38  
 Buying powers, 38

## C

- Campaign, the, 78
  - Chicago Pneumatic Tool Company, 88
  - co-ordinating the, with sales effort, 81
  - the dealer's, 95
  - the local, 90
  - local, the results of a, 93
  - localized, 96
  - each mail piece a part of the, 139
  - National Tube Company, 87
  - planning the, 78
  - points to be considered in planning the, 79
  - the salesman's, 90
  - in the technical magazines, 88
- Campaigns, co-operative advertising, 94
  - mass, 81
  - special, 81
- Catalogue, the, 148
  - loose-leaf versus single, 148
  - sizes, 150
- Catalogues, 143
  - Lockwood's eight points on, 148
- Changing the copy, 101
  - a product to fit a market, 25
- Channels through which the product reaches the user, 37
- Character, continuity and distinction of, 82
- Charting expenditures, 74
- Charts, 217
- Cheap versus high grade art work, 208
- Checking returns, 72
- Choosing the magazines or newspaper, 124
- Circulation, wastes of, 119
- Commendation, letters of, 184
  - statements of, 184
- Comparison of advertisements in technical and popular magazines, 112
- Competition, factors of, 31
- Competitors, successful, 40
- Competitors' products, 30
- Component market, 37
  - defining a, 37
- Component markets, the factors that define the, 37
  - and the appropriation, 69
- Conditions governing manufacture, 30
- Construction, 30
- Constructive service, 176
- Consumer, the, 64
  - house organ, the, 167
- Consumer's opinion of copy invited, 88
- Continued story style of copy, 87
- Continuity and distinction of character, 82
- Contrast, distinction by, 225
- Controlling advertising expenditures, 73
- Co-operation of advertising and selling forces, 81
  - dealer, 285
  - sincere, needed, 286
- Co-operative advertising campaigns, 94
- Copy, appeals, harmonized, 103
  - changing the, 101
  - consumer's opinion of, invited, 88
  - continued story style of, 87
  - first or illustration, 217
  - for a given paper, the right, 250
  - gathering material for, 245
  - general points for, 238
  - good will, 237
  - literary value in, 230
  - needs study, 251
  - to obtain inquiries, 236
  - to obtain orders, 235
  - principles that govern all classes of, 227
  - technical advertising, 227
  - the technique of, 247
  - the three classes of, 234
- Correct technically, the advertisement must be, 55
- Cost, of maintenance, 30
  - per message, 21

- Cost per unit prospect reached effectively, 55  
     per unit of service, 30  
     of the physical factors of delivering products, 38  
     relation of the, of selling and advertising to the volume, 40
- Counsel, advertising, 268  
     the general, 272
- Counselors, losses due to, 23
- Coupon, the, 236
- Criticisms of advertisements, 297
- D
- Data, arrangement of, 45  
     on returns necessary, 18
- Dealer, the, 40  
     co-operation, 285  
     factors that interest the, 31  
     helping the, cultivate his territory, 292  
     house organ, the, 165  
     interesting the, 196  
     and manufacturer relation, 294  
     selling the, 286  
     selling the organization of the, 288
- Dealers, advertising the product marketed through, 58
- Dealer's campaign, the, 95  
     salesmen, selling the, 288
- Delivery of the message, effective, 21
- Department, the advertising, 257  
     organization of, 263  
     the spirit of, 266
- Department, the service, 276
- Design, 30
- Designer, education of the, 172
- Designing a product or changing it to fit a market, 25
- Desire, 235
- Direct advertising expense, 73
- Direct-mail, advertising, 126  
     pieces, appearance of, 128  
     powerful sales auxiliary, 127  
     standards in, 126
- Direct results, 252
- Disbursements, relation of, to sales, 75
- Display, technical advertising, 203  
     practice, 203  
     three purposes of, 203
- Distinction and continuity of character, 82
- Distinction by contrast, 225
- Distribution, methods governing, 35
- Dramatic mass appeal, the, 106
- Dramatized report, the prospectus a, 143
- Dramatized story, possibilities of the, 84
- Drawings, mechanical, 217  
     original, 222
- Drive, the big, 100
- Durability, 30
- Duties of the advertising manager, the, 258
- E
- Early days, the methods of, 273
- Economic losses in present-day advertising, 22  
     problem, 18  
     problem and its elements, 20  
     problems, general, of advertising, 20
- Economics of popular mediums, 117
- Economies accomplished by the product, 38
- Editor, of the house organ, 158  
     the, a salesman of ideas, 107
- Editorial, appeal, the, 103  
     pages, judging the magazine from the, 102
- Editor's leadership, 105
- Educating the student engineer, 173
- Education of the designer, 172
- Educational work, 170
- Effective delivery of the message, 21  
     sales messages, 21
- Employee's magazine, 161
- Enclosures, envelope, 137
- Engineer, the, 61  
     and business, 5  
     th steel mill, 91



Engineer's opportunity, the, 19  
 responsibility, 35  
 Engineer's service, available, 31, 185  
 necessary, 40  
 Engineering societies, the maga-  
 zines of the, 110  
 papers before the, 172  
 Envelope enclosures, 137  
 Estimate, arriving at the final, of the  
 size of the market, 45  
 Example for an accessory, 60  
 Exhibitions, 175  
 Expenditures, charting, 74  
 controlling advertising, 73  
 Expense, direct, 73  
 indirect, 73  
 total advertising, 73

## F

Facts, sales, getting the, 80  
 Field photo service, 279  
 Fitting the advertising, to the mar-  
 ket, 54  
 to the product, 54  
 Folders, 133  
 Follow-up letter, the, 135  
 Form, of guarantees, 194  
 standardized, 82  
 Freight, 30

## G

Gathering material for copy, 245  
 General counsel, the, 272  
 Getting sales substance for adver-  
 tisements, 196  
 Good-will copy, 237  
 Group division, 277  
 Guarantees, 185, 190  
 form of, 194

## H

Harmonized copy appeals, 103  
 Headline, the, 228  
 Helping the dealer cultivate his  
 territory, 292  
 History, 30

House organ, the consumer, 167  
 for the dealer, 165  
 the editor of the, 158  
 the employee's, 161  
 getting the material for the,  
 156  
 the salesman's, 159  
 what the, can do, 154  
 House organs, 154  
 characteristics common to four  
 types of, 156  
 Human interest appeal, 243

## I

Illustration or copy first, 217  
 Illustrations, 185, 206  
 kinds of, 217  
 Indirect advertising expense, 73  
 Industries, to which the product is  
 suitable, 37  
 sub-divisions of the, 37  
 Information, sources of, 52  
 Inquiries, copy to obtain, 236  
 Inquiries, sources of, 52  
 Institution, the, 185  
 Institutional advertising, 86, 188  
 Interest, 235  
 Investigator, the problems of the, 43

## L

Laboratory, methods of the, 35  
 Lantern slides, 174  
 Leadership, the editor's, 105  
 Letter, the follow-up, 135  
 Letters, of commendation, 184  
 to dealers, 134  
 to dealer's salesmen, 134  
 following up inquiries from  
 other advertising, 134  
 sales, 133  
 to users, 134  
 Lists, mailing, 129  
 getting the names for, 129  
 of users, 184  
 Literary value in copy, 230  
 Literature, advertising, 349  
 printed, three classes of, 147

Local campaign, the, 90  
 Localized campaigns, 96  
 Loose-leaf versus single catalogue,  
 148  
 Losses, due to counselors, 23  
     economic, in present-day adver-  
     tising, 22  
     due to the manufacturer, 22  
     due to the mediums, 23

**M**

Magazine, choosing the, 124  
 Magazines, the, of the engineering  
     societies, 110  
     the popular, 114  
     popular, and newspapers, the  
         economics of, 117  
     popular, products advertised  
         economically in, 120  
     technical and trade, 99  
 Mail, direct, 126  
 Mailing lists, 129  
     getting the names for, 129  
 Mail piece, each, a part of the cam-  
     paign, 139  
 Mail pieces, series or unrelated,  
     138  
     the various forms of, 132  
 Manager, the advertising, 258  
     duties of, 258  
     the training of, 257  
 Manufacture, conditions governing,  
     30  
 Manufacturer, the, 62  
 Manufacturer and dealer relation,  
     294  
 Market, analysis, better standards  
     needed in, 34  
     component, defining a, 37  
     definition of the, 37  
     estimating the size of the, 40  
     for the product, 34  
 Marketing plan, first, 59  
     fitting advertising into a, 59  
 Markets, the component, 36  
     analysing, 38  
     and the appropriation, 69

Markets, the factors that define, 37  
 Mass appeal, dramatic, 106  
 Materials, 30  
 Mechanical drawings, 217  
 Medium, suiting the form and ap-  
     peal to the, 55  
 Mediums, choice of, 55, 84  
     defined, 84  
     losses due to, 23  
 Methods of making up the appro-  
     priation, 67  
 Money-making features of the pro-  
     duct, 185  
 Moving pictures and lantern slides,  
     174

**N**

Names, for mailing lists, getting the,  
     129  
 National advertising, 66  
     an illustration of when to use,  
     115  
 News, 185, 196  
 Newspapers, 122  
     choosing the, 124  
 Novelties, 137

**O**

Objective of the advertising, 85  
 Operating characteristics, 30  
 Orders, copy to obtain, 235  
 Organization principle, an, 273  
     that effects flexibility, 279  
 Organs, house, 154  
 Original drawings, 222

**P**

Papers before engineering societies,  
     172  
 Photo, field, service, 279  
 Photographs, 184, 222  
 Pictures, moving, 174  
 Planning, the campaign, 78  
     Westinghouse advertising, 84  
 Plant, the, and the organization,  
     190

- Popular magazines and newspapers,  
     the, 114  
     economics of, 117
- Price, 30, 38, 184
- Prints, blue, 220
- Printing, the, 153
- Product, the, 20, 25  
     analysing, 25, 26  
     appearance of, 30  
     convenience in use of, 30  
     designing a, to fit a market, 25  
     effect on labor of, 30  
     effect on production of, 30  
     ego, 33  
     factors of, 30  
     industries to which, is suitable,  
         37  
     the market for, 34  
     money-making features of, 185  
     price of, 38  
     quality of work done by, 30  
     savings made by, 30  
     the service of, 30  
     standard, and specialty, 26  
     standardized, 198  
     unusual features of, 30  
     use of, 26  
     what, will do of importance, 31  
     in working clothes, 213
- Products, competitors', 30  
     advertised economically in  
         popular magazines, 120
- Production to-day, sales to-morrow,  
     14
- Promotion, advertising and sales,  
     170
- Proof needed, 120
- Prospects for the product, 20
- Prospectus, the, 143  
     arranging the material for, 144  
     binder or cover for, 143  
     conditions peculiar to the use of,  
         146  
     the distinction of form of, 146  
     a dramatized report, 143  
     a powerful form of sales argu-  
         ment, 145  
     the size of, 144  
     the value of, 146
- Prospectus, when to use, 145
- Psychology of the market group, 57
- Publicity in the technical and trade  
     papers, 171
- Publisher's advice to the advertiser,  
     280
- Publisher's service department, the,  
     273
- Purchaser, the, 61
- Purchases, average amounts of in-  
     dividual, 40
- R
- Records, good, are valuable, 71
- Relation, dealer and manufacturer,  
     294
- Repeat-order product, 40
- Report sheets. for market analysis,  
     43
- Research, possibilities of applying  
     principles of, 34
- Results, direct, 252  
     of a local campaign, the, 93
- Returns, checking, 72  
     data on, necessary. 18
- S
- Sales engineer's territory, the, 35  
     letters, 133  
     messages, effective, 21  
     power, advertisements must  
         have, 179  
     power test for, 202  
     promotion and advertising, 170  
     resistance, 38  
     substance for advertisements,  
         196
- Salesman's campaign, the, 90  
     house organ, 159
- Salesmen, selling the dealer's, 288  
     the territory without, 57
- Salesmen's suggestions, 198
- Sampling, the method of, in market  
     analysis, 41
- Saturation of centers with prospects,  
     39
- Schedule, the, 99

Science, invention is a, 35  
 Selling the dealer, 286  
 Selling the dealer's salesmen, 288  
 Service, available, engineering, 185  
     conditions governing, 30  
     constructive, 176  
     department, the, 276  
     department, example of the, 277  
     department, the publisher's, 273  
     field photo, 279  
     range of, 30  
     records, 30  
     records, authenticated, 184  
 Series, or unrelated mail pieces, 138  
 Simplicity in display, 225  
 Size of the market, estimating the, 40  
 Sizes, catalogue, 150  
 Sources of information, 52  
 Space, the, 235  
     the amount of, 100  
 Specialty, 30, 38, 198  
     and standard product, 26  
 Speculation, large element of, 114  
 Standard product and specialty, 26  
 Standardized form, 82  
     product, 30, 38, 198  
 Standards, in direct-mail practice, 126  
 Statements of commendation, 184  
 Steel mill engineer, the, 91  
 Story, dramatized, 84  
 Student engineer, educating the, 173  
 Substance, getting, for advertisements, 196  
 Superlatives, too many, 234

T

Technical products defined, 9  
 Technical or service agency, the, 271

Technical and trade magazines, 99  
     advantages and disadvantages of, 110  
     advertising of the Westinghouse Company in, 108  
     publicity in, 171  
 Technique of copy, 247  
 Territorial distribution of the prospects, 39  
 Territories, 37  
 Territory without salesmen, 57  
 Test for sales killing power, 202  
 Tests, 30  
     authenticated, 185  
 Trade paper publicity, 171  
 Trade papers classified, 102  
 Trade and technical magazines, 99  
 Training of advertising manager, the, 257  
 Type, 225

U

Users, lists of, 184

V

Volume, 38

W

Wastes of circulation, 119  
 Welfare work, 261  
 Westinghouse advertising, planning, 84  
     in popular magazines, 120  
     in technical and trade magazines, 108  
 When to analyze, 29  
 Working clothes, the product in, 213





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